RECORDS RELATING TO CESIUM AT THE K-25 PLANT:

A GUIDE TO RECORD SERIES OF THE DEPARTMENT OF ENERGY

AND ITS CONTRACTORS

DRAFT

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INTRODUCTION

Overview

The purpose of this guide is to describe the documents and record series at the K-25 plant that pertain to the handling of waste containing cesium-137 produced as a result of processes to enrich uranium and separate plutonium at the Department of Energy's (DOE) Oak Ridge National Laboratory (ORNL) and Oak Ridge Gaseous Diffusion Plant (ORGDP, called K-25) in Oak Ridge, Tennessee. History Associates Incorporated (HAI) prepared this guide as part of DOE's Epidemiologic Records Inventory Project, the purpose of which is to verify and conduct inventories of epidemiologic and health-related records at various DOE and DOE contractor sites.

This introduction briefly describes the Epidemiologic Records Inventory Project and HAI's role in it. Specific attention is given to the history of the DOE-Oak Ridge Reservation, the history and development of the K-25 plant, the creation and handling of cesium-contaminated waste, and environmental monitoring efforts at ORNL and K-25 from the late 1940s to the present. This introduction also presents the methodology used to identify the documents and series pertaining to cesium, a discussion of the inventory of these documents, information concerning access to the site and the records, and a description of the arrangement of the chapters.

The Epidemiologic Records Inventory Project

The Epidemiologic Records Inventory Project reflects the efforts of DOE Secretary Hazel R. O'Leary to support openness initiatives in the areas of environment, safety, and health. In view of the importance of various administrative, organizational, and operational records to epidemiologic and health-related studies, a moratorium on the destruction of such records has been in effect since 1989.

In May 1992, the DOE Office of Epidemiology and Health Surveillance (EH-42), responsible for coordinating epidemiologic-related activities throughout the Energy complex, directed each DOE site and DOE contractor to prepare an inventory of all records pertinent to worker or community health-related studies. EH-42 prepared and furnished each site with guidelines that defined epidemiologic records, provided instruction for describing record series, outlined the site's role in inventorying epidemiologic records, and discussed the relationship of the epidemiologic inventory to DOE's comprehensive records inventory. These inventories should be completed in 1995.

In August 1993, DOE selected History Associates as its support services contractor for the Epidemiologic Records Inventory Project. HAI, a professional records management,

archives, and historical research services firm incorporated in 1981, has provided records management, historical research, and technical support for a number of DOE projects. HAI's role in the project includes verifying the accuracy, comprehensiveness, and quality of existing inventories, providing guidance to site records management teams, and, in some cases, conducting additional inventories.

In June and August 1994, HAI began a pilot study at the DOE-Oak Ridge Reservation. The primary purpose of this pilot project was to assist DOE in responding to the information needs identified in a meeting with DOE, the Tennessee Department of Health (TDH), and other stakeholders in March 1994. These groups expressed an interest in the classified mercury collection and records relating to cesium-137, radioactive lanthanum (RaLa), and iodine-131. HAI began this task by inventorying and describing the record series contained in the collection of classified documents related to operations that used large quantities of mercury and, subsequently, produced a guide to the mercury collection. With the production of this cesium guide and a guide to the records of the Oak Ridge National Laboratory, DOE will be able to provide valuable assistance to health researchers needing to locate and examine records relating to these hazardous substances and the processes that produced them.

HISTORY OF OAK RIDGE

The Oak Ridge Reservation

Oak Ridge, Tennessee, was one of three sites established by the Manhattan Project during World War II for the development of the first atomic weapons. Selected on September 19, 1942, the Clinton Engineering Works (CEW), later called the Oak Ridge Reservation (ORR), was the site of three major production facilities, which were known by the code-names X-10, Y-12, and K-25. The X-10 site, which later expanded to become the Oak Ridge National Laboratory, housed the country's first full-scale graphite reactor. Known then as the Clinton Pile, the graphite reactor provided irradiated uranium slugs from which plutonium could be separated at the Oak Ridge plants. The Y-12 facility produced enriched uranium-235 by means of electromagnetic separation, and the K-25 plant, also known as the Oak Ridge Gaseous Diffusion Plant (ORGDP), produced enriched uranium-235 by a gaseous diffusion process.

The Oak Ridge facilities produced significant amounts of hazardous waste, leading the Environmental Protection Agency (EPA) to include Oak Ridge on its National Priorities List of Superfund hazardous waste sites in November 1989. In 1991 DOE signed the Oak Ridge Health Agreement which provides funds to the state of Tennessee for independent health assessment studies of the Oak Ridge operations and surrounding population.

THE HISTORY OF K-25 OAK RIDGE GASEOUS DIFFUSION PLANT

Since 1943, three contractors have been involved with the construction and operation of K-25. The US Army Corps of Engineers, which ran the Manhattan Project, selected the Kellex Corporation to construct the large facility, along with the Carbide and Carbon Corporation, later known as the Union Carbide Corporation, to operate the plant. Union Carbide continued operation of the plant after atomic energy activities were turned over to the Atomic Energy Commission. In 1984, Martin Marietta Energy Systems assumed the managing and operating contract for K-25.

The K-25 facility began in May 1943, with the construction of a massive building to house the gaseous diffusion process. The U-shaped building, known as K-25, is four stories tall, a fifth-of-a-mile wide, a half-mile long on each leg, and encompasses nearly two million square feet. In January 1945, K-25 completed its first enrichment run and shipped the product to Y-12 for further processing. The facility reached its full operational capacity by August 1945.

Enrichment of uranium by gaseous diffusion occurs when gaseous uranium hexafluoride (UF_6) is passed, under pressure, through a porous membrane shaped into the form of a tube, known as a "barrier." The uranium in the gas is composed of several isotopes, the most common of which are U-235 and U-238. U-235 and U-238 molecules have different atomic sizes and weights, and they travel at different speeds. U-235 will pass through the porous barrier, while the heavier and slower U-238 remains within the membrane and is shunted to a different level in the enrichment process. By passing through many sequences of the barrier, called a "cascade," the percentage of U-235 ultimately present in the gas is significantly higher than in the original UF_6 compound. At the end of a run, the desired U-235 is captured from one end of the cascade, while depleted uranium (primarily U-238) is purged from the other end of the system.

The late 1940s and early 1950s witnessed the expansion of the K-25 site in terms of physical size and the breadth of its research and production goals. By 1954, K-27, K-29, K-31, and K-33 had joined K-25 as facilities for the enrichment of uranium through gaseous diffusion. After satisfying the nation's military needs for enriched uranium, K-25 and K-27 ceased operation in 1964. However, the enrichment of uranium fuel for civilian power reactors continued in buildings K-29, K-31, and K-33. The ORGDP also developed new high-technology enrichment programs, such as the 1960s Gas Centrifuge and the 1988 Atomic Vapor Laser Isotope Separations (AVLIS) processes. In 1985, gaseous diffusion operations ceased and these facilities were placed on standby.

Presently, the mission of K-25 is to spearhead environmental clean-up and restoration, not only at K-25, but throughout the entire Oak Ridge Reservation. Included in this mission is the Environmental Restoration Program, which oversees the identification and remediation of environmental contamination throughout the complex. Another aspect of this mission is the operation of the Toxic Substances Control Act (TSCA) Incinerator for the destruction

of mixed wastes. K-25 began testing the incinerator in 1988 and placed it in full-scale operation in 1990.

CESIUM AT K-25

Cesium-137 is a radioactive metal that possesses a half-life of approximately 30.17 years. It is one of the main fission by-products of the chemical processes that yield plutonium and other enriched nuclear fuels. From the early 1940s to the 1960s, ORNL produced sizable quantities of the nuclide. Cesium-137 is also a major component of the fallout from a nuclear explosion. It emits a strong gamma ray, 661 keV, during decay, which makes it useful in radiation therapy. The intense gamma radiation also means that it must be properly shielded and handled, because uncontrolled exposure to it is dangerous. At room temperature, cesium is a liquid that reacts violently with other materials. It bonds predominantly with chlorides to create cesium salts that are extremely soluble in water.

Since the 1950s, K-25 received wastes containing cesium-137 from the ORNL and the Hanford site. K-25 stored the waste and used it in waste-processing experiments. Currently, K-25 is concerned with the monitoring and clean-up efforts in areas which were effected by the cesium. However, ORNL discharged much of its liquid waste, which contained cesium-137, into area waterways such as the Clinch River and White Oak Creek. Cesium-137 affects the ecology of these waterways as it settles in riverbed sediments, contaminates aquatic vegetation, and is absorbed in the tissue of fish and other aquatic animals. Cesium-137 makes its way into the human community by consumption of food grown in contaminated soil and fish pulled from contaminated waterways. Chemically similar to potassium and sodium, cesium-137 may deposit in the body in ways similar to these elements, particularly in the tissues of the stomach, large and small intestines, liver, spleen, and muscle.

In the 1960s, ORNL deliberately released cesium-137 into fields near the Clinch River to study how the nuclide behaves in the environment after a nuclear explosion. As a result of this surface contamination, cesium-137 contaminated the groundwater and entered the Clinch River through surface water run-off and erosion.

SITE ACCESS

Although access to the K-25 site itself does not require a DOE "L" or "Q" clearance, or a demonstrated need to know, movement throughout the site is restricted according to clearance level, and since several of the document centers are located in the secure area, onsite researchers are stongly advised to have a "Q" clearance. The primary site contact is Sheila Thornton, K-25 TOA Coordinator, P.O. Box 2003, K-303-8, MS-7314 Oak Ridge, TN 37831, (615) 574-9525.

Several of the document centers are located in the "open" area of the plant, which does not require an "L" or "Q" clearance for admittance. These centers include the K-25 Site Document Response Center (K-1200), Health and Safety Division Document Management Center (K-1001-B, Room 131-B), and the Environmental Restoration Program Document Management Center (K-1210). Most of the documents maintained in these centers are unclassified, but some may be restricted to internal use only, with access limited to employees of DOE and DOE-contractors.

The Technical Library (K-1002) is also located in the open area of the plant. The library differs from the document centers in that it maintains general reference publications and reference services for any patron. However, the library also maintains a classified index. Examination of this card file requires a "Q" clearance and a Classified Information Access Control form (UCN 583) on file in the library. Researchers are required to use the classified index and review classified documents in a secure vault within the library. Any notes taken by researchers in the classified area must be reviewed by the Classification and Information Control Office and sanitized, if necessary, before they may be taken off the site.

The Site Records Center (K-1034-A), the Environmental Management Division Document Center (K-303-8, Room 13), and the two Waste Management Division Document Centers (K-1400, K-1423) are all located in the "secure" area of the site. Access to this area is controlled through a second security gate. Personnel without clearance must be escorted and supervised at all times by someone with either an "L" or "Q" clearance. Moreover, in the Site Records Center, even cleared personnel may not stay in the vault areas without the presence of center personnel. In addition, notes created by researchers at the Records Center must be reviewed and sanitized, if necessary, by the Classification and Information Control Office before they may be taken offsite.

RECORDS BACKGROUND

At the K-25 site, most records that contain information on cesium pertain to environmental monitoring and restoration activities. These records are spread among several program document centers onsite, all of which maintain independent databases and methods of arrangement. The centers maintain the collections at the document rather than series level.

In general, all of the centers use a combination of file codes and report numbers to arrange the documents in their care. The databases differ from center to center, but are all capable of keyword searches, and provide the same basic information, including one or more of the following: report title, date, author(s), file code or bar code number, report number, keywords, and an abstract. A staff member will conduct a search on the database using any of these data elements provided by a researcher. Researchers are not permitted to browse through either the databases or report collections at will; they must request specific reports from each center for review. Because the databases are updated frequently to incorporate

the new records that come into the centers, hard copies of the database indexes are not maintained.

K-25 Site Document Response Center
This center maintains documents from several onsite programs, and is one of the easiest to use. Some of the documents at this center are duplicates of reports held in specific program document centers. These documents have not all been assigned a classification level and, therefore, should be considered for "Internal Use Only," with access limited to DOE and DOE-contractor employees.

Contact: Larry Waters
P.O. Box 2003, K-1200, MS7262
Oak Ridge, TN 37831
(615) 576-9650

Environmental Management Division Document Center
This center deals primarily with the records created by the Environmental Management Division at K-25. It maintains some records which concern early environmental monitoring for cesium.

Contact: Pam Crisp
P.O. Box 2003, K-303-8, MS7314
Oak Ridge, TN 37831
(615) 574-9527

Health & Safety Division Document Management Center
This center is one of the newest centers on site, and it contains some of the most recently produced documents reviewed by HAI, generally from the 1990's. These records concern environmental monitoring as it relates to worker health. The number of relevant documents is quite small.

Contact: Pat Roberts
P.O. Box 2003, K-1001-B, MS7171
Oak Ridge, TN 37831
(615) 574-8513

Technical Library
HAI researchers located cesium-related documents in the Technical Library by searching an extensive classified index. Much of the pertinent information is from the early years of the site, often merely a small section within a plant-wide status report. Status reports, experiment results, testing manuals, and papers describing environmental monitoring activities are typical of the types of records found in the library. Many of the documents are formerly or currently classified items.

Contact: Scott Carley and John Arrowood
P.O. Box 2003, K-1002, MS7221
Oak Ridge, TN 37831
(615) 574-9694

Site Records Center
HAI visited this facility during both its June and August 1994 trips to Oak Ridge but did not locate any records pertaining to cesium. The center acts primarily as a holding center for records that will eventually be sent to the regional Federal Records Center in East Point, Georgia.

Contact: Emma McCaskill and Joe Smith
P.O. Box 2003, K-1034A, MS7221
Oak Ridge, TN 37831
(615) 574-8193

Waste Management Division Document Centers
These centers maintain the reports and records produced by the Waste Management Division. The two centers often operate in tandem to provide reference services. The center in K-1400 maintains Division-generated reports that provide program administrative and managerial guidance, project planning and status updates, and project results. The center in K-1423 maintains some reports but focuses primarily on active records such as "Request for Disposal" forms, waste manifests, and Resource Conservation and Recovery Act [RCRA] inspection logs, that document ongoing Division activities.

Contacts: Pat Holliday
P.O. Box 2003, K-1400, MS7363
Oak Ridge, TN 37831
(615) 241-2838

Debora Newman
P.O. Box 2003, K-1423, MS7467
Oak Ridge, TN 37831
(615) 574-7551

Environmental Restoration Program Document Management Center (ERDMC)
This is one of the oldest and largest document centers on the K-25 site. It is responsible for reports generated by the Environmental Restoration Program throughout the Reservation. Besides its main center in K-1210, the ERDMC also maintains satellite centers at Y-12 and ORNL for documents that pertain solely to those sites. After early investigations revealed that cesium contamination was not an issue at Y-12, HAI focused its research at the main center and the satellite at ORNL. Record copies of all reports created for Environmental Restoration projects, whether at K-25, Y-12, or ORNL, are given a barcode, entered in the center database, and maintained in the main center.

Contact: Jayne Haynes and Becky Lawson
P.O. Box 2003, K-1310-H, MS7256
Oak Ridge, TN 37831
(615) 241-3761

METHODOLOGY

In preparation for the June and August trips to the Oak Ridge Reservation, HAI researched background information on processes that involved the use of cesium, particularly at K-25. In May, HAI visited the Records Management Department of K-25, toured the Technical

Library and other document centers, and asked Records Management to provide photocopies of K-25 organizational charts, record inventory sheets, and other information helpful to the preparation of the inventory project. This information made it possible to focus on specific aspects of cesium disposal and contamination at K-25 and the entire ORR. HAI compiled and sent a list of search terms to K-25 to be used in preliminary database searches in an effort to locate potential records. The sources utilized by the HAI team to formulate a list of terms to use in searches included the ChemRisk *Oak Ridge Health Studies: Phase 1 Report*, completed in September 1993, the Oak Ridge Federal Facility Agreement document, various reports generated by Oak Ridge divisions, and inventory lists of active records from the K-25 site.

Each Document Center searched its database and generated document lists from which HAI identified records to review based on titles, dates, abstracts, and other information. On site, HAI used various terms from the list thought to be most appropriate to search the classified index in the Technical Library to find other relevant documents and sections within larger reports. HAI researchers also interviewed personnel in offices holding active records, including Environmental Management, Environmental Restoration, Industrial Hygiene, and Waste Management. A list of interviewees is provided in Appendix A.

After identification, HAI reviewed the records for their applicability to cesium. Documents specifically mentioning cesium, concerning burial/waste areas, or relating to environmental monitoring were inventoried and described in this guide.

PRODUCTION AND USE OF THE GUIDE

After completing the inventory at the K-25 document centers, HAI researchers analyzed their inventory forms and developed record series and chapter divisions for this guide. Users should note that since the document centers maintain their collections at the document level, the guide describes records at the document level rather than in record series. The records were arranged into series when possible; otherwise they were grouped into chapters based on their subject matter. Descriptions of the documents and record series found in this guide include the report or series title, inclusive dates, location, status (active or inactive), access restrictions, identification code or report number(s), and volume. Descriptions also provide information on the medium in which the record exists, its suitability for scanning, its physical condition, the availability of finding aids, the originating office, any known duplication, and the disposition authority.

LIMITATIONS OF THE GUIDE

This guide reflects HAI's June and August 1994 inventory site visits. Because the Oak Ridge document centers maintain records at the document level, HAI inventoried records at the document level rather than at the series level. When possible, the researchers developed and used broad categories of documents to organize the descriptions of the records. It should also be noted that the collections of records at the document centers are not static; new documents are added to the centers continually, and as documents become outdated and obsolete, they may be removed from the collection and the center databases updated. Additionally this Guide may be revised after future visits to the Federal Records Center in East Point, GA and the DOE Records Center in Oak Ridge.

ARRANGEMENT OF THE GUIDE

Documents are arranged in series, where possible, and they are grouped in chapters based on subject matter. Record descriptions are arranged alphabetically by report title in each of the following chapters:

I. Policies, Plans, and Procedures
Policy documents detail the administrative activities and controls set in place for the management of various programs onsite. Plan and procedure documents outline the "how-to" of programs; detail the administrative, security, quality assurance, safety, sample gathering, data management, and environmental protocols and guidance set in place; and explain the activities which occur throughout the program's duration.

II. Environmental Monitoring (onsite)
These documents pertain to onsite environmental monitoring activities that occur either on an ongoing or a one-time-only basis. The reports often include discussions of the testing results, the methodology used to collect the samples, and strategies for choosing the test locations. These reports have been further divided into six categories based on the focus of the reports.

--*Biological Monitoring and Abatement Program* records consist of the annual reports of the activities of this monitoring program. The ORGDP, ORNL sites, and outlying areas are included in these reports.

--*K-1407* documents deal solely with monitoring efforts at the K-1407-B Holding Pond and K-1407-C Retention Basin.

--*K-1417* reports are concerned with the storage and monitoring activities at the K-1417 Drum Storage Yard and the associated K-1419 Sludge Treatment Facility, where sludge from the K-1407-B&C ponds was taken, treated, and stored.

--*White Oak Creek Embayment* records are comprised of documents reporting the activities surrounding the background, construction, operation, and environmental monitoring of the White Oak Creek Embayment area, where cesium contamination was found.

--Remaining onsite, ongoing monitoring records which do not pertain to one of the above categories have been placed in the *General, ongoing* category.

--Records in the *General, one-time* category are records generated as the result of a one-time investigation, such as an initial investigatory survey, resampling to clarify anomalous readings in a routine survey, or an area characterization study.

III. Environmental Monitoring (offsite)
These documents are similar to those in Chapter II and consist of the same types of information, except the monitoring occurred at offsite locations. The small number of documents in this group makes further subdivision unnecessary.

IV. General
Items in this chapter do not readily fit into one of the above chapters. As such, they have been placed into one of the categories below which most accurately reflects the contents and intent of the report.

--*Historical* reports provide a broad overview of the waste and environmental activities that have taken place on the Oak Ridge Reservation. They may document operations, locations, waste types, operating years, and environmental monitoring at waste burial areas that span several years.

--*Waste Activities* documents provide summaries of waste management activities and the waste amounts generated by the various processes in use at K-25 and X-10. Also included in this category are waste characterization reports which detail the types and constituents of wastes that are buried or stored on the K-25 site.

--*General* documents are those which do not fall into any of the above chapters or chapter sections. Included in this section may be experiment results, pilot-project studies, background investigations, leachability studies, and other information.

Data Items in Record Descriptions
Record descriptions for these four categories contain fifteen major data items, which are listed and further explained below.

Title and Inclusive Dates
Each record description begins with a title that is either the title of the report or one that reflects the nature of the reports in the series. The date of the report or the inclusive dates of the record series is also included.

Location
Information regarding the physical location of the record and an indication of its status, whether active or inactive, is provided here. The records are located almost exclusively in the document centers on the K-25 site. A few of the records are located in the Environmental Restoration Program's satellite Clinch River ERDMC at ORNL.

Access Restrictions
In addition to site access restrictions, other limitations on viewing or obtaining documents may apply to some of the records. Documents that are classified for national security purposes require that an individual have a DOE "Q" clearance and a demonstrated need to know for access. Furthermore, items marked "Internal Use Only" may be restricted to DOE and certain contractor personnel, and in any case, the information may not be released offsite without permission. More information about specific center access restrictions can be found in the Site Access section of the Introduction to this Guide.

Classified Information
To assist researchers and others in understanding the types of classified information and the restrictions that govern access to it, the following excerpts from the DOE's *Understanding Classification* (June 1987) are provided:

Categories of Classified Information
There are three categories of classified information: Restricted Data; Formerly Restricted Data; and National Security Information.

1. RESTRICTED DATA (RD) is a special category of classification with which the Department of Energy is principally concerned. The Restricted Data category is defined in the Atomic Energy Act as follows:

> "The term RESTRICTED DATA means all data concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear materials; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142."

2. FORMERLY RESTRICTED DATA (FRD) is information which has been removed from the Restricted Data category after the Department of Energy and the Department of Defense (DOD) have jointly determined that the information related primarily to the military utilization of atomic weapons and can be adequately

safeguarded in the same manner as National Security Information in the United States. This is known as transclassification. Such data may not be given to any other nation except under specially approved agreements.

3. NATIONAL SECURITY INFORMATION (NSI) is information which requires protection against unauthorized disclosure in the interest of the national defense or foreign relations of the United States and has been determined to be classified in accordance with the provisions of Executive Order 12356 or a prior Executive order.

Levels of Classified Information
There are three levels of classified information: Top Secret; Secret; and Confidential.

1. TOP SECRET is the level assigned to information of utmost importance to the national defense and security. Its unauthorized disclosure could reasonably be expected to cause *exceptionally grave damage* to national security.

2. SECRET is the level for information which, in the event of an unauthorized disclosure, could reasonably be expected to cause *serious damage* to national security.

3. CONFIDENTIAL is the level for information which, in the event of an unauthorized disclosure, could reasonably be expected to cause *damage* to national security.

For further information, see also DOE Office of Safeguards and Security Headquarters, *Security Education Overview Handbook* (DOE/SA-0004).

Volume
An estimated volume of the records is given in inches or cubic feet. Items measuring less than a quarter-inch in thickness are designated by <0.25 inch. A sizeable series is measured in cubic feet.

Accession/Other Identification Number
Each document center has a unique filing system that can include the report number assigned by the creating division or program and the center's filing or barcode system. In the series and document descriptions, the report number is provided first, followed by the document center number in parentheses. If no report number is available, the document center number stands alone in parentheses. In cases where multiple document centers and reports are referred to in a description, the report and file numbers are listed chronologically according to the date of the report.

Condition
HAI judged the physical condition of the documents and record series, categorizing them as either good, fair, or poor. If the records were judged to be in poor condition, an explanation is provided.

Container numbers
All of the materials described in this guide are located in open shelving or filing cabinets with access restricted to center personnel only; therefore, container numbers are not applicable (N/A).

Medium
The physical nature of the records, such as paper, photograph, or microcard, is noted.

Scanning Suitability
HAI has provided a statement concerning the suitability of records for electronic scanning purposes. Factors which may effect scanning suitability, including paper size, weight, ink and paper colors, type font, and the presence of handwritten data, graphs, diagrams, and photographs are noted under this heading. Depending on future state-of-the-art scanning technology and equipment, this statement may or may not remain accurate.

Duplication
Reports described in the guide that exist in several K-25 document centers are so noted under this heading. Documents in the Environmental Restoration Program Document Management Center may also exist in a public-release form at the DOE-OR Public Document Reading Room, 55 Jefferson Circle, Oak Ridge, TN 37831, (615) 241-4780. Items with ORNL report numbers should also be available at ORNL, Building 4500N, Room H205 Vault or the library, which the ORNL Technical Information Document Database (TIDD) can confirm.

Arrangement
Arrangement pertains to the document center's filing code number. Each center uses a unique filing system that can include the report number assigned by the originating division as well as the center's numerical filing code.

Originating Office
The originating office that generated the report or record series is noted here. This will include the division and program or department title.

Finding Aids
Each document center database and other applicable finding aids are noted.

Disposition Authority
Disposition authority refers to the NARA General Records Schedules and DOE Records Schedules. The majority of records inventoried have not been assigned a disposition schedule and are cited as not applicable (N/A); however, when a record is scheduled, the information is noted.

Data Elements
In accordance with the guidelines in *Information Required by the Department of Energy for Epidemiologic and Health Studies*, DOE developed a list of 123 (later revised to 85) data elements to assign to record series descriptions. In general, the data elements consist of terms pertaining to contractor organizations, individual employees, industrial hygiene activities, facility characteristics, and environmental monitoring efforts that help categorize and describe the major information contained each. The data elements assigned to each document or record series are listed as numbers that correspond to the data elements found in Appendix B.

Action Plan for the Management of K-1407-B and -C Ponds Waste at the Oak Ridge K-25 Site, January 31, 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: K/PW-3 (ER002001283)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains engineering drawings

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Pond Waste Management Project

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report outlines the activities that will be undertaken to maintain control of the pond waste stored at K-25. It discusses actions to overpack raw sludge containers and transfer these to [Resource Conservation and Recovery Act] RCRA-compliant storage areas; repair and restack the drums left in the K-1417 storage yard to permit inspection; treat raw and stabilized wastes; and handle long-term storage while waiting for final disposal. The plan describes goals and strategies for each of these phases; presents a schedule; and, in the appendices, provides the results of sludge, soil, and water sample analyses. The report includes engineering drawings for existing and proposed storage areas. Cesium results are measured in picocuries per liter (pCi/l) and disintegrations per minute per gram (dpm/g).

Data Elements: 89, 117, 124

Amended Closure Plans for the K-1407-B Holding Pond and K-1407-C Retention Basin at the Oak Ridge K-25 Site, Oak Ridge, Tennessee, October 1992

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.75 inches

Accession or Other ID Number: 1) DOE/OR-1072&D1 (92:02099); 2) DOE/OR-1073&D1 (92:02103)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series of reports was prepared in anticipation and in the process of closing the K-1407-B and -C waste sites. The results of sampling done at the sites in 1990 identified numerous radiochemicals and other contaminating substances, including cesium-137. Sampling data in the reports include: borehole numbers, depth in inches, and results in picocuries per gram, picocuries per kilogram, and milligrams per kilogram (pCi/g, pCi/Kg, and mg/Kg). In addition, the reports provide site and facility background information, closure procedures and plans, work performed, and problems encountered.

Data Elements: 89, 103, 124

[Report on] Contaminated Soil Storage on the Oak Ridge Reservation, June 7, 1993

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 3 pages

Accession or Other ID Number: (93:01116)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Waste Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report briefly describes the methods by which contaminated soil is handled on the Reservation. It also lists the primary contaminants (uranium and daughters at K-25, cesium-137, strontium-90, and cobalt-60 at ORNL); the approximate amounts stored, in curies; and the type of storage used at each site.

Data Elements: 89

Environmental Monitoring and Inspection Plans for the K-1417 Drum Storage Yard at Oak Ridge K-25 Site, March 31, 1991

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center; K-1200, K-25 Site Document Response Center

Access Restrictions: Unclassified; internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: 1) (H15-8.8, 92:01165); 2) K/PW-4

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Pond Waste Management Project

Finding Aids: Document center databases

Disposition Authority: N/A

Series Description: This planning document delineates the sampling and analysis protocols and procedures to be used to monitor the run-off from the K-1417 drum storage yard. A sample collection system diagram, field sampling and lab analysis forms, tracking records, and other diagrams are provided. Contingency plans for spills and emergencies are also outlined, along with lists of equipment used for spill responses and personnel protection.

Data Elements: 81, 88, 89

Environmental Monitoring Plan for the Oak Ridge Reservation, November 12, 1991

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: (00840)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts, diagrams, and maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report acts as an "omnibus document" for reference purposes for effluent monitoring and environmental surveillance activities at ORNL, Y-12, K-25 and outlying reservation areas. It outlines program rationale and criteria; sampling frequency; and analytical, quality assurance, implementation, and reporting procedures. The report also describes dose calculation criteria, and geological and hydrogeological information about the sites which is necessary to help determine the proper monitoring activities.

Data Elements: 88, 89, 95, 117

Environmental Monitoring Plan for Waste Area Grouping 6 [WAG-6] at Oak Ridge National Laboratory [ORNL], Oak Ridge, Tennessee, September 1993

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: DOE/OR/01-1192&D1 *or* ORNL/ER-158&D1 (ER018228)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and charts

Duplication: [ORNL] See page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document presents the environmental monitoring plan for WAG-6 at ORNL. The monitoring plans and activities have been set in place to comply with the decision to stay further remedial measures while monitoring and research continue. The report outlines the Environmental Restoration Program strategy; site background data (history, regulatory background, and investigation overview); program monitoring objectives; monitoring, sampling, and analysis frameworks and plans; risk assessment issues (methods for evaluating changing environmental conditions or changes in chemicals of concern); and program administration. Appendices list test parameters and selection criteria, measurement units (picocuries per liter (pCi/l) for cesium), analysis sensitivity, and preliminary calculations of risk at White Oak Creek. Also included is a list of pertinent reference documents and a glossary of terminology. Maps and diagrams illustrate monitoring efforts and locations.

Data Elements: 3, 89, 95, 103, 124

Field Work Guide for Groundwater Sampling for Analytical Analysis at Waste Area Grouping 5 [WAG-5], January 19, 1993

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: 19118-050WG-3 Rev. 0 (ER010577)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: By Bechtel National Inc., for ORNL

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This guide outlines the requirements for sampling groundwater at WAG-5. Lists of test parameters, a sampling schedule, and groundwater conditions are included, as are sampling procedures, location, and frequency; and methods used for sample preparation, purging wells, quality control, decontamination, and documenting data. Materials to be used by the sampling team are listed. Environmental and health hazards are briefly summarized (stating that wastewater generated by the sampling will consist of unknown chemical and radioactive constituents) as are past analyses, which give well location, type, depth, and construction data. Cesium measurements are recorded in picocuries per liter (pCi/l) for amounts found at wells 0523, 0519, 0436, 0517, and 1188.

Data Elements: 89, 103, 124

Groundwater Quality Sampling and Analysis Plan for Environmental Monitoring in Waste Area Group 6 [WAG-6], March 1994

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/ER-203 (ER016802)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains form samples

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This environmental monitoring report for WAG-6 outlines planned sampling and analysis activities. Procedures and methodologies are discussed for organic, inorganic, and radiological test parameters. The plan provides the program's objectives; test locations, frequency, and analytes; instructions for measuring water levels, purging wells, and taking samples; and quality assurance, health and safety, and data management considerations. Appendices contain samples of field forms, the sampling schedule, and a hazard evaluation that establishes safety guidelines, lists contaminants and their physical properties, and reviews emergency preparedness guidelines and general training requirements. In general, cesium, gross alpha, and gross beta activity readings are given in becquerels per liter (Bq/l).

Data Elements: 89, 95

Groundwater Sampling and Analysis Plans for Environmental Surveillance Monitoring at the Oak Ridge K-25 Site, January 1990, September 1991

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center; K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified; internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: 1) K/HS-362 (00576); 2) K/HS-286 (ER00120)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable: contains maps, forms, and diagrams

Duplication: The 1990 report may also be found in the K-1210, Environmental Restoration Program Document Management Center.

Arrangement: Numerical by file code

Originating Office: Health, Safety & Environmental Management Division, Environmental Management Department

Finding Aids: Document center databases

Disposition Authority: N/A

Series Description: These reports detail plans for sampling and analyzing groundwater at K-25. Outlined in the plans are personnel responsibilities; descriptions of project activities at environmental surveillance sites, Resource Compensation and Recovery Act [RCRA] sites, and remedial action sites; sampling schedules; field sampling, analysis, and quality control procedures; a list of references used to prepare the plan; samples of forms used during sample collection and analysis; lists of analytes from earlier testing; and lists of the required equipment used at the wells (e.g., types of sample containers). Beta activity results are measured in picocuries per liter (pCi/l).

Data Elements: 81, 89, 95, 103, 117, 118, 124

[Plan Regarding the] Inventory, Behavior, and Fate of Transuranics and Fission Products in the Clinch River, White Oak Creek Drainage, and Poplar Creek Drainage, February 24, 1976

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (00485 box #9)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: ORNL Director's Office

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document is essentially a proposal for monitoring the Clinch River, White Oak Creek, and Poplar Creek, and their effluents and influents. Included are cost break-downs and proposals to establish protocols, collect early samples, define existing radionuclide concentrations, and identify seeping and leaching sources within the Oak Ridge Reservation. A time-frame for sampling programs and radioisotope inventories is also included.

Data Elements: 89

K-25 Quality Assurance Program Plan for the Pond Waste Management Project, [1991]

Location: 1. Active:
2. Inactive: K-1400 Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (91:01029, QAP:45-91-0005)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Pond Waste Management Project

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document describes the Quality Assurance [QA] requirements of the Pond Waste Management Project [PWMP] for the handling of solidified and untreated sludge resulting from the closure activities of the K-1407-B and-C ponds at K-25. It explains the QA program, sets out procedures for the handling, storage and shipping of "components," "material," and onsite "products" [that could include cesium] and for testing controls and inspection. An organizational chart of the PWMP is included.

Data Elements: 89

K-1407-B and C Ponds, Drums, and Bulk Storage Remedial Action Plan, October 3, 1990

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: K/PW-1

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams and layouts

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Pond Waste Management Project

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This plan lays out the activities of the Pond Waste Management Project [PWMP] which were developed to bring the K-1407-B/C ponds waste into compliance with federal guidelines. The plan contains a general background of the site, its current status, and areas of concern. Four stages of activity--immediate response, temporary storage, waste treatment, and long-term storage--are identified and outlined, along with a general schedule. Appendices provide the results of sludge analyses, soil and water analyses, and drum layout and storage diagrams. The program management section discusses organization, community relations, planning, and training activities for the project.

Data Elements: 89, 117, 124

Low-Level Radioactive Waste and Mixed Waste Management Plan, December 1987

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: K/HS-97 Rev. 1 (HS/87-0009)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report sets out procedures for handling low-level and mixed wastes. It describes processes that generate these wastes and each waste facility. The results of some surface water, sediment, vegetation, and soil analyses required for National Pollutant Discharge Elimination Systems [NPDES] permits are also included. These list the test parameters, sample type, frequency of testing, and daily averages and maximums measured in milligrams per liter (mg/l). Sludge analyses list the analytes and average, minimum, and maximum readings for each. Cesium was measured in disintegrations per minute per gram (dpm/g).

Data Elements: 3, 89, 103

A Manual of the Radiochemical Determination of Fission Products Activities, June 30, 1945

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2 microcards

Accession or Other ID Number: CN-2815

Condition: Poor; cards are very faint and difficult to read

Container Numbers: N/A

Medium: Microcards

Scanning Suitability: Not suitable; report is on microcards

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Chemistry Division

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This manual discusses the methods, techniques, and important considerations involved in the radiochemical analytical process. Detailed, explicit procedures for the determination of fission products, including barium, cesium, and iodine are included, as are references to the original research reports.

This is a basic manual used for the analysis of waste products for fission products.

Data Elements: 89, 95

Oak Ridge Gaseous Diffusion Plant [ORGDP] Groundwater Protection Program Management Plans, 1989-1993 (noninclusive)

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center; K-1400, Waste Management Division Document Center; K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.5 inches

Accession or Other ID Number: 1) K/HS-258; 2) K/HS-258, Rev. 1 (90:00067); 3) K/ER-72 (ER011818); 4) K/ER-114 (ER015320)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps, diagrams, and flowcharts

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: 1) Groundwater Protection Program, 2-4) K-25 Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center databases

Disposition Authority: N/A

Series Description: These reports document the formal management practices and procedures of the K-25 Groundwater Protection Program (later the Groundwater Program). They outline the program mission and history, pertinent regulations and monitoring requirements, personnel responsibilities, relationships with other K-25 programs, documentation requirements, monitoring strategies, existing well and Waste Area Grouping locations, area climate, hydrogeologic conditions, and aquifer behavior. Plans for safety and health, quality assurance, well installation, monitoring, sampling and analysis, data management, remedial actions, well abandonment, and inspection and maintenance are discussed, and reference lists of supporting documents and regulations are provided. Location maps, diagrams and information flow charts further explain the program.

Data Elements: 1, 3, 5, 89, 95, 117

Oak Ridge Gaseous Diffusion Plant [ORGDP] Long-Range Environmental and Waste Management Plan, September 1989

Location: 1. Active:
2. Inactive: K-1423, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.5 inches

Accession or Other ID Number: K/HS-93

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains organizational and flow charts

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report outlines the goals and plans for long-term environmental and waste management activities at K-25. It includes information on budget; management issues; regulatory compliance concerns (clean air legislation, Toxic Substances Control Act, Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act [TSCA, RCRA, and CERCLA]); solid, radioactive, hazardous, classified, and nonhazardous wastes; remedial actions; decontamination/decommissioning concerns; environmental management; groundwater monitoring; and other monitoring plans and goals for the site.

Data Elements: 1, 3, 89

Oak Ridge Gaseous Diffusion Plant [ORGDP] Radioactive Waste Management Implementation Plan, April 1989

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: K/HS-261 (HS/89-0366)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Waste Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report contains the 1989 management plan for the Waste Management program. It includes definitions, activities at the waste sites, characterizations of wastes stored at those sites, acceptance criteria, disposal site design, decommissioning summaries, listings of documentation used in the program, and waste generation rates.

Data Elements: 3, 89

Oak Ridge K-25 Site Annual Groundwater Monitoring Plans, FY1991, FY1993

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center; K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: 0.75 inches

Accession or Other ID Number: 1) K/HS-345; 2) K/HS-345 (ER002008463); 3) K/ER-55 *or* K/HS-386 (ER011099)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps, diagrams, and handwritten data

Duplication: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Arrangement: Numerical by file code/report number

Originating Office: 1-2) Environmental Management Division; 3) Environmental Monitoring and Permitting Department, K-25 Environmental Restoration Program

Finding Aids: Document center databases

Disposition Authority: N/A

Series Description: These reports discuss the groundwater monitoring plans for the K-25 site. They provide locations; sampling schedules; "sample parameters"; procedure document numbers; sample forms used for sampling, analysis, and reporting; maximum analyte values and measurement units; a discussion of the changes in the monitoring methods from previous years; and the changes in monitoring activities at specific well sites.

Data Elements: 3, 5, 88, 89, 95, 124

Oak Ridge K-25 Site Monitoring Program: Surface Water, Soil, and Sediment Sampling and Analysis Plan, February 1994

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: K/EM-64

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report outlines monitoring activities for surface water, soil, and sediment at locations around the K-25 site. Responsibilities of the Environmental Management Division and the Sampling and Environmental Support Department are discussed. The plan lists additional general sampling requirements and sampling sites. It gives testing parameters for each site, testing methods, sample frequency and type (e.g, weekly frequency, 24-hour composite type), and analysis type used.

Data Elements: 88, 89, 124

Oak Ridge Operations Radioactive Contamination Control Policy, June 1989

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (HS/89-0501)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Health, Safety, & Environmental Affairs, Oak Ridge Operations

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report describes the controls set in place to prevent the radiation contamination of personnel, equipment, and facilities. The types of radiation are not clearly specified. The policy explains terminology and provides sign, monitoring, area control, and personnel monitoring requirements; permissible limits for surface and furniture contamination; and guidelines for clothing and personnel in areas of possible contamination.

Data Elements: 81, 89, 102, 107

Phase 2 Remedial Investigation Work Plan for the K-1070-C/D Classified Burial Ground, June 1991

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: (H14-6.3, 91:00822)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and diagrams

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Restoration Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 3-volume report discusses current site conditions and contaminant potential for the classified burial ground at K-25. The report addresses previous investigations of the area and summarizes the sample data from boreholes, surface water, and soil analyses. Volume 2 describes the quality assurance parameters for the investigation, and Volume 3 details the sampling plan which will be put in place.

Data Elements: 88, 89, 103, 117

Plan for the Management of K-1407-B and -C Ponds Waste at the Oak Ridge K-25 Site, August 16, 1991

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: K/PW-6 (H15-8.8 91:00289)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and diagrams

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Pond Waste Management Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report details the 1991 management plan put in place for the clean-up and closure of the K-1407-B and -C waste ponds. It outlines Resource Compensation and Recovery Act [RCRA] and Environment, Safety, and Health compliance concerns; managerial strategies; and requirements for technical support. Topics include the storage areas in K-33 and K-25, drum containment for the short and long term, drum processing and storage at K-1417, and sampling, inventory management, closure, and raw waste treatment issues. A project schedule is included, as are sludge, pond, and water sampling results. Maps and diagrams show the storage areas in use and those options under consideration. Cesium-137 results are measured in disintegrations per minute per gram and picocuries per gram (dpm/g and pCi/g).

Data Elements: 89, 103, 117, 124

Plans and Procedures for Shipments, 1989-1991 (noninclusive)

Location: 1. Active:
2. Inactive: K-1200, K-25 Quality Division Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: (00375, 1-7 of 7)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains copies of forms, labels, and sign postings

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This is a compilation of seven "Standard Practice Procedure" documents relating to the transportation and management of radioactive waste. The documents include pertinent federal & DOE regulations; definitions of terms; actions required by the involved departments (Traffic, Health Physics, Waste Management); samples of forms, postings, and labels; minimum detectable activity limits for radionuclides (including cesium); and personnel responsibilities.

Data Elements: 5, 89

Policy for Management and Review of Radiologically and Chemically Contaminated Soil Generated for Construction/Excavation Activities, March 1993

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.25 inches

Accession or Other ID Number: (93:00461)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: DOE Field Office, Waste Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document describes the policy for using radiologically and chemically contaminated soil for other uses. It explains how each type is to be identified (as Radioactive Waste Soil, Restricted Use Soil, General Use Soil, or Unrestricted Use Soil in Clean Areas, Toxic Substances Control Act-Regulated Areas, Comprehensive Environmental Recovery, Compensation, and Liability Act-Regulated Areas, or Resource Conservation and Recovery Act-Regulated Areas) and how the various types should be handled and used. A chart lists acceptable alpha activity levels in disintegrations per minute per square centimeter (dpm/cm^2), beta/gamma activity levels in millirads per hour (mrad/h), and mixed isotopes and uranium concentrations in picocuries per gram (pCi/g) in radiologically contaminated soils.

Data Elements: 89

Pond Waste Management Project [PWMP] Environmental Monitoring and Inspection Plans for the K-1417 Drum Storage Yard at the Oak Ridge K-25 Site, March 7, 1994

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K/PW-4/R1 (ER016471)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and form samples

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Pond Waste Management Program, Hazardous Waste Remedial Action Program, Environmental Restoration Waste Management Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This March 1994 document outlines projected monitoring and inspection activities at the K-1417 storage yard. The plan describes the site and the automatic samplers used for the monitoring, and lists an inspection schedule and potential concerns. The inspection activities described are those whose results are in the Resource Conservation and Recovery Act [RCRA] inspection logs series. [See Chapter IV.] A sample copy of the required form is also included, and a map shows the locations of the storage yard and the automatic samplers.

Data Elements: 89

Proposed Plan for the K-1407-B/C Ponds, K-25 Site, Oak Ridge, Tennessee, August 1992

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: DOE/OR-1013&D2 (92:02096)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: By Radian Corporation for Martin Marietta Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report outlines the planned activities for environmental restoration of the K-1407-B and -C Ponds. It presents both the preferred method of action--backfilling the pond areas and alternative methods. Other topics are the site's history/background, the scope of proposed actions, site risks (including radiocesium), plan evaluations, and health and safety and regulation requirements. Brief notes on community involvement and acceptance are also included.

Data Elements: 89

Remedial Design Report for the K-1407-B Holding Pond and the K-1407-C Retention Basin at the Oak Ridge K-25 Site, March 1994; Remedial Design Work Plan, February 1994

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: 1) (94:0625); 2) (94:00371)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains engineering drawings

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: The Remedial Design Report describes the actions to be taken to handle the residual contaminants, primarily radionuclides, left in the K-1407 ponds after sludge was removed for Resource Compensation and Recovery Act [RCRA] compliance. The bulk of the report consists of the technical specifications and engineering drawings needed to carry out the remedial actions. The Work Plan outlines quality controls; personnel responsibilities; proposed land improvements; groundwater monitoring plans; contingency plans; site safety, health, and waste management plans; permit requirements; and construction activities for the project.

Data Elements: 89, 117

Resource Conservation and Recovery Act [RCRA] Closure Plan for the K-1417 Concrete Block Casting and Storage Yard and the K-1419 Sludge Fixation Facility, September 1992

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (ER008356)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and charts

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report discusses the closure activities for the K-1417 and K-1419 areas, which will decontaminate the facilities and monitor the generated wastes and surrounding soils for contamination. It includes facility descriptions and histories; a characterization of the environmental setting; performance standards; the notice of intent to close; closure schedules; and procedures for decontamination, soil sampling, analysis, and certification. Cost estimates, insurance requirements, and post-closure care are also given. Appendices contain sludge and run-off analyses, which list contaminants, including cesium, in disintegrations per minute per gram (dpm/g). Maps indicate the locations of closure activities.

Data Elements: 89, 117, 124

Resource Conservation and Recovery Act [RCRA] Facility Investigation Plans, 1987-1989

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.5 inches

Accession or Other ID Number: 1) K/HS-133 (HS/87-0015); 2) K/HS-140 (HS/87-0020); 3) K/HS-146 (HS/88-0020); 4) K/HS-135 (HS/88-0014); 5) K/HS-140 Rev. 1 (HS/89-0154)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Oak Ridge Gaseous Diffusion Plant

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series consists of the RCRA Facility Investigation Plans for the following K-25 sites: K-1070-A Contaminated Burial Ground, K-1070-C/D Classified Burial Ground, K-1070-F Old Contractors' Burial Ground, and the K-1407 Waste Area Grouping [WAG], which includes the K-1407-A Neutralization Pit, K-1407-B Pond, K-1700 Stream, and K-1070-B Classified Burial Ground. The documents discuss the status of the sites and the investigations necessary to complete the studies and comply with RCRA. Data concerning the historic, operational, geographic, geologic, and hydrologic characterizations of the areas are included, as are discussions concerning investigation objectives, scheduling, evaluation criteria, risk assessment, potential corrective actions (monitoring source removal, containment, and treatment of contaminated materials), sampling strategies, analysis protocols, and health and safety procedures. Included in the appendices are lithologic logs, boring diagrams, and sample analyses results, which include lab numbers, site locations, well identifications, test parameters, results, and analyst names. Cesium, alpha, beta, and gamma activity levels are measured in disintegrations per minute per gram (dpm/g) and in picocuries per liter (pCi/l).

Data Elements: 81, 89, 102, 117

Resource Conservation and Recovery Act [RCRA] Health and Safety Plan for the K-1417 Concrete Block Casting and Storage Yard and the K-1419 Sludge Treatment Facility, September 1992

Location: 1. Active:
2. Inactive: K-1210 Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (ER008356)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document provides the safety and health plan for closure activities of the K-1417 Casting Yard and K-1419 Sludge Treatment Facility. The document lists the scope and purpose of the plan, current conditions and baseline risks, training requirements, medical monitoring requirements, air and personnel monitoring types and frequency, site access controls, decontamination procedures, emergency contingency plans, confined space entry requirements, and sanitation issues. An appendix contains a summary of a sludge constituent analysis, which lists the analytes, and maximum, minimum, and mean values for each constituent. Cesium is measured in disintegrations per minute per gram (dpm/g).

Data Elements: 89, 90

Surveillance Monitoring Plan for Inactive Environmental Restoration Remedial Action Sites at the Oak Ridge K-25 Site, December 7, 1993

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: (93:02449)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Hazardous Waste Remedial Actions Program, Environmental Restoration Waste Management Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report documents the plan used for surveillance and maintenance of various waste sites around K-25. It includes general explanations of the appropriate regulations and the scope and objectives of the Environmental Restoration Program plan. It describes the program structure, responsibilities, maintenance procedures, and quality assurance standards. A chart summarizes activities at each site, including location, status, operating history, physical description, current conditions, hazard assessment, security procedures, and surveillance and maintenance activities. The summaries do not specify specific radioactive wastes but generally describe the types of waste deposited at the sites.

Data Elements: 3, 89, 117

Waste Management Plan for Pond Waste Management Enhanced Surveillance and Maintenance, August 1993

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K/PW-24 *or* K/ER-104 (ER015663)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Systems Engineering for the Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document outlines the plans to identify, repackage, transport, and store previously unprocessed sludge from the K-1407-B and-C ponds currently stored in drums. The report covers the project background; waste management codes, guidelines, regulations, orders, and procedures being used; waste classifications; administrative activities; and quality assurance issues. Charts and diagrams identify the storage areas, outline the project schedule, identify the program's organization, and diagram the flow of the waste.

Data Elements: 1, 89, 117

Waste Management Plan for the Remedial Investigation of Waste Area Grouping 2 [WAG-2] at Oak Ridge National Laboratory, Oak Ridge, Tennessee, June 1993

Location: 1. Active:
2. Inactive: ORNL Building 1505 Room 359, Clinch River Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified

Volume: 0.25 inches

Accession or Other ID Number: (W2-012406)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: By bar code number

Originating Office: ORNL, Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report defines the criteria and methods to be used for managing waste generated during activities associated with WAG-2 at ORNL. These wastes, generated primarily as part of monitoring, sampling, and investigatory activities, include such items as personal protection equipment, sample containers, residues, and other equipment. Cesium-137, tritium, cobalt-60, and strontium-90 are among the suspected contaminants. The report also defines responsibilities and responsible parties, analyses to be performed for waste characterization, suspected contaminants, and disposal methods for contaminated materials. This report does not provide information on concentrations of contaminants or sampling data.

Data Elements: 89

Biological Monitoring and Abatement Program [BMAP] Reports, 1986-1994 (noninclusive)

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: 13.0 inches

Accession or Other ID Number: 1) ORNL/TM-10370 *or* ORNL/RAP/LTR-86/50 (ER004627); 2) ORNL/TM-10399 (ER009766); 3) ORNL/TM-10399 (ER012951); 4) ORNL/TM-Draft (ER013826); 5) ORNL/TM-000000 (ER002592); 6) ORNL/TM-12083 (ER006747); 7) ORNL/TM-10399 (ER008669); 8) ORNL/TM-10814 (ER015167); 9) K/EM-24/R1 (ER011047); 10) K/EM-24/R2 (ER011985); 11) ORNL/TM-12385 (ER012155); 12) ORNL/TM-11073 (ER013797); 13) ORNL/TM-12150 (ER016776)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts, graphs, diagrams, maps, and flow charts

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division, Environmental Restoration Program

Biological Monitoring and Abatement Program [BMAP] Reports, 1986-1994 (noninclusive) (continued)

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of reports which document the planning and results of the BMAP programs for the K-25, Oak Ridge National Laboratory [ORNL], White Oak Creek watershed, Clinch River, and Mitchell Branch areas. These reports are required under the National Pollutant Discharge Elimination System [NPDES] permits held for the above areas of the Oak Ridge Reservation. The program's seven tasks--toxicity monitoring, bioaccumulation monitoring of nonradiological contaminants in aquatic biota, biological indicator studies, instream ecological monitoring, assessment of contaminants in the terrestrial environment, the radioecology of the areas, and the transport, distribution, and fate of contaminants in the area water systems are detailed. Previously identified problem areas (e.g., effluents from K-1407-E, K1407-F, and K-1417, and White Oak Creek and Melton Branch) are discussed, along with program objectives; site geohydrology, discharges, and effluents; sampling-site selection criteria; existing ecological and monitoring data; and program tasks and subtasks, including objectives and methodology. Reference lists of relevant regulatory and support documents, information and data flow charts, and test parameter lists are also included.

Cesium contaminant results are prominent in some sections of the reports, and measurement units vary widely, but include picocuries per gram, becquerels per kilogram, picocuries per square centimeter, and curies (pCi/g, Bq/kg, pCi/cm^2, and Ci).

Data Elements: 3, 89, 95, 103, 117, 118, 122, 124

Annual Groundwater Reports: K-1407-B and C Interim Status Units at the Oak Ridge K-25 Site, 1988-1993 (noninclusive)

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center; K-1210, Environmental Restoration Program Document Management Center; K-1001-B Room 131-B, Health & Safety Division Document Management Center; K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 3.25 inches

Accession or Other ID Number: 1)K/HS-257 (ER000581); 2) (H13-5.3:K-1407, 90:00301); 3) (HS/89-364); 4) K/HS-287 (ER000580); 5) (H13-5, 92:00236); 6) K/ER/Sub/ 92-BVR30/7 (93:00469)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of annual monitoring data reports for the K-1407-B and -C ponds. The reports detail the ponds' background, hydrogeology, and sampling data from each of the pond's monitoring wells (dates, depths, and test parameters) supplemented by field measurements, lithologic logs, and well construction diagrams. The monitoring system and frequency are noted. Wells, especially upgradients, with abnormal or unusual readings (not clearly defined) are discussed, as are possible reasons for the anomalies. Included in the 1992 report is information on the modified detection program put in place that year and a study on Toxic Substances Control Act [TSCA] heavy metals. Radioactivity measurements are taken at alpha and beta activity levels, with readings in picocuries per liter (pCi/l).

Data Elements: 89, 103, 117, 124

Characterization of the K-1407-B and -C Ponds Raw Sludge and Laboratory Cured Concrete Cubes, March 1992

Location: 1. Active:
2. Inactive: K-1423, Room 3, Waste Management Division Document Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: 3.0 inches

Accession or Other ID Number: KTCD-1019

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: K-303-8 Room 13, Environmental Management Division Document Center

Arrangement: Numerical by file code/report number

Originating Office: Waste Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report is an extensive characterization of the K-1407 pond sludges in various storage states at K-1417. The report provides background information on sampling protocols and statistical models, analytical protocols, concerns about potential sludge characterizations which could lead to storage and treatment problems, and general recommendations and conclusions. The bulk of the report is in appendices, which consist of copies of the Analytical Chemistry Department's analyses of the sludge and cube samples. These pages contain project numbers, sample identification numbers, analysts names, material descriptions, dates of testing, procedure numbers, test parameters, results, limits of error, measurement units, and "QA numbers." Cesium readings are given in picocuries per gram (pCi/g).

Data Elements: 89, 95, 124

[Report on] Concentrations of Radionuclides Found Outside of the K-1407-C Retention Basin as Determined from Samples Collected During June, 1974, June 1974

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1 page

Accession or Other ID Number: (H15-8.8, ND:5085)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This single-page report documents the concentration of technetium-99, neptunium-237, plutonium-239, and cesium-137 in five samples for each of these four radionuclides in soil or water (the report is not clear). Location numbers, concentration in curies per gram x 10^{-13} ($Ci/gx10^{-13}$), concentration divided by average concentration, and concentration divided by the limit of detection are recorded for each radionuclide and sample location.

Data Elements: 103, 124

Data Analysis Approach Report for the K-1407-B Holding Pond and the K-1407-C Retention Basin, March 1990

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K/ER-23/D0 (90:00112)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report, assessing the threat to human health and the environment, describes the methodology used to evaluate the analytical data from a [Resource Conservation and Recovery Act feasibility] investigation for the K-1407-B and -C ponds. The evaluation also determines the appropriateness and validity of the data for use in a quantitative risk assessment.

Data Elements: 88, 89

Exposure Information Report: K-1407-B Retention Basin, October 9, 1985

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: 1) (H15-8.8, 85:50173); 2) (H15-8.8, 85:50763)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and diagrams

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Coordinator

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1985 exposure information report considers the potential for chemical exposure to human and nonhuman populations from contamination of the environment by wastes at the K-1407-B Retention Basin. The report includes information about land use, potentially exposed populations, waste characterization, site-specific contamination transport pathways, and exposure potential. Maps show the site and surrounding areas.

Data Elements: 88, 89, 117

Groundwater Data from Resampling of K-1407-B Pond Wells, July 9, 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (ER000211)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains handwritten data

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report consists of a cover letter and accompanying data from a resampling of the wells at the K-1407-B Pond. The packet includes sample collection forms, which contain the well number, location, "AnaLIS" number, date and time, well measurements (depth, casing), sample types collected, and field measurements (conductivity, temperature, pH). Analytical Chemistry Department notes record the results of sample analyses, which contain project, "AnaLIS," and customer identification numbers, a material description, activity and procedure numbers, results, limits of error, measurement units (picocuries per liter for cesium), analysts names, "QA file" number, and completion date. A copy of the chain-of-custody record for the samples is attached.

Data Elements: 89, 103, 124

Groundwater Monitoring Well Data for K-1407-B and -C, [no date], 1986-1990 (noninclusive)

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: 1) (H15-8.8, ND:50192); 2) (H15-8.8, 86:50177); 3) (H15-8.8, 86:50179); 4) (H15-8.8, 88:51059); 5) (H15-8.8, 89:50764)

Condition: Fair to Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Coordinator

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of analyses results for groundwater monitoring wells. The reports, which are computer-generated, list the test analytes and the corresponding measurement unit, identify the tested wells, and indicate quarterly readings. Upgradient wells are marked as such, and samples are noted as being filtered or unfiltered. The 1990 report also includes the analyst's name, procedure numbers, QA file number, and date completed.

Data Elements: 103, 124

[List of] K-1407-B Pond Sediments, [no date]

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2 pages

Accession or Other ID Number: (H15-8.8)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 2-page document lists the contaminants measured in sediment samples from the K-1407-B pond at five numbered locations. Cesium-137 is among the contaminants and the results are given in picocuries per gram (pc/gm). The second page notes the volume, weight, and density of 15 sediment samples.

Data Elements: 103, 124

K-1047-C Pond Sampling Results, 1972-1979

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (H15-8.8, 79:50971)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains handwritten data and maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Isotopic Analysis Department

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document consists of handwritten analyses of sludge samples taken from the K-1407-C Pond, 1972-79. They include data on sludge depth, consistency, and radioactive contaminants. Several memoranda regarding the removal of the sludge from the pond and the potential hazard to workers are also included.

Data Elements: 89, 103, 124

Oak Ridge Gaseous Diffusion Plant [ORGDP] Groundwater Monitoring Well Data for K-1407-B, [1985-1988]

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K/ER-000616 (ER000616)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document contains a list of analytes tested for in samples obtained from monitoring wells at K-1407-B from 1985 to 1988. Information in the report also includes test dates, well identification, results for each well, and measurement units. Radioactivity testing is limited to beta activity, and results are given in picocuries per liter (pCi/l).

Data Elements: 124

Oak Ridge Gaseous Diffusion Plant [ORGDP] Resource Conservation and Recovery Act [RCRA] Groundwater Monitoring Data for K-1407-B and -C, May 12, 1986

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K/ER-005516 (ER005516)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Environmental Coordinator

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document consists of data from groundwater monitoring wells at K-1407-B and -C during the first quarter of 1986. The data include test parameters, well number (UNW 1-11), test date, "Aliquot" (filtered, unfiltered, or field-measured parameter), test results and units, and any comments. Radioactivity results are limited to gross beta activity, which is measured in picocuries per liter (pCi/l).

Data Elements: 124

Oak Ridge Gaseous Diffusion Plant [ORGDP] "RFI" Sites' Groundwater Monitoring Well Data, Sites K-1407-B and K-1407-C, [1987-1988]

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.25 inches

Accession or Other ID Number: 1) K/ER-001215 (ER001215); 2) K/ER-001214 (ER001214)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of two listings of analytes found in samples of groundwater taken from monitoring wells at K-1407-B and K-1407-C. The lists give the analyte, unit of measurement, and results for four test dates: August 6, 1987, September 4, 1987, December 8, 1987, and March 18, 1988. Cesium and other radionuclides are not specifically analyzed for. All radioactivity, broken down by alpha, beta, and gamma activity levels, is reported in picocuries per liter (pCi/l).

K-1407-B wells tested were: BRW-7, BRW-7F, BRW-8, BRW-8F, UNW-20, UNW-20F, UNW-22, UNW-24, UNW-24F, UNW-25, UNW-25F, UNP-3, UNP-3F, UNP-5, UNP-5F.

K-1407-C wells tested were: BRW-13, BRW-14, UNW-23.

Data Elements: 124

Phase 1 Hazard Screening Analysis for Facilities K-1407-B and K-1407-C Holding Pond and Retention Basin, January 1992

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: HS/K-1407BC/PK/73.0/RO (93:00756)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Safety Analysis Report Update Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report describes a 1992 hazard screening analysis of the K-1407-B and -C ponds that looked into the types and concentrations of materials found in the ponds, including cesium and other radionuclides; examined the effects of natural phenomena such as floods, strong winds, tornadoes, and earthquakes on the contents of the ponds; and spelled out the requirements for safety documentation. A site description and drawing and statistical tables are also provided.

Data Elements: 89, 103, 124

Radioactivity Analysis Reports, 1974-1980

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: 1) (H15-8.8, 74:50930); 2) (H15-8.8, 74:50931); 3) (H15-8.8, 79:50862); 4) (H15-8.8, 80:50772)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not suitable; data is entirely handwritten

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Isotopic Analysis Department

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series consists of handwritten data sheets from the Isotopic Analysis Department which document the results of soil sample analyses. Samples came from the K-1407-B, -C, and Ditch areas. Readings for cesium-137, plutonium, neptunium-237, technetium-99, beta, and alpha activity, are measured in 10^{-7} micro[counts] per gram. The January 1980 report also includes results for K-1407-C ground and environmental water samples with measurements given in picocuries per liter.

Data Elements: 103, 124

[Record of] Radionuclide Concentration in Soil, Oak Ridge Gaseous Diffusion Plant [ORGDP], K-1407-C, [no date]

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1 page

Accession or Other ID Number: (H15-8.8, ND:50419)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This single-page report records the concentrations of uranium-235, uranium-238, neptunium-237, americium-241, and cesium-137 in picocuries per gram (pCi/g) in soil samples taken from identified locations around K-1407-C.

Data Elements: 103, 124

[Memorandum on] Sediment Removal, K-1407-B Holding Pond, September 21, 1961

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2 pages

Accession or Other ID Number: (H15-8.8, 61:50859)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Nuclear Safety Department

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1961 memorandum discusses considerations surrounding the removal of waste sediment from the K-1407-B pond to another location. The sediment was contaminated with low-level radioactive waste that had come from a variety of plant locations.

Data Elements: 89

Soil Sample Analysis [for K-1407-C], [no date]

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2 pages

Accession or Other ID Number: (HS/89-0230)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Survey and Site Assessment Program, Oak Ridge Associated Universities

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 2-page report records gamma spectroscopy analyses done on samples of soil taken from locations in K-1407-C. Radionuclide concentrations are measured in picocuries per gram (pCi/g) for cesium-137, uranium-235, uranium-238, neptunium-237, and americium-214, with a +/- error factor noted for each reading.

Data Elements: 103, 124

Categorization of Drums, July 24, 1990

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (ER001792)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1990 report summarizes the stabilization process undergone by the sludges removed from the K-1407-B and-C ponds and stored at K-1417. Described are the packing materials (steel drums, polyethylene bags); conditions of the raw and stabilized sludges within the barrels (i.e., free liquids, trapped liquids, unset cement); and the grout formula. Analyses of the sludges and free liquids in the drums are outlined. Cesium results are given in disintegrations per minute per gram (dpm/g).

Data Elements: 89, 124

Description of Stabilized Pond Sludges Stored in Drums on the K-1417 Yard, August 1991

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K/QT-428 (91:00525)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Technical Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1991 report discusses the make-up of stabilized pond sludge stored in drums at the K-1417 drum storage yard. It gives a detailed history of sludge stabilization processes and the limitations and problems encountered during this processing. Other information includes the grout formula used, previously available sludge characterization data, a discussion of unknown factors (primarily free liquids) that could be present when the drums are opened, general conclusions regarding future visual inspections, and a list of references used in compiling the report. Cesium-137 appears in the list of sludge constituents. Measurement units vary between disintegrations per minute, picocuries, and curies per gram (dpm/g, pCi/g, and Ci/g).

Data Elements: 89, 124

[Report on] K-1407-B and K-1407-C Ponds Drums and Bulk Storage, vol. 1-2, July 31, 1990

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: K-2066/V1 and K-2066/V2 (ER001001; ER001002)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs, photographs, and diagrams

Duplication: K-1400, Waste Management Division Document Center; K-1200, K-25 Site Document Response Center

Arrangement: Numerical by file code/report number

Originating Office: Pond Waste Management Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This two-volume report describes the activities and rationale involved in the corrective action study of the storage of the wastes from the K-1407-B and -C Ponds. The first volume discusses noncompliance and hazard concerns at the K-1419 Sludge Treatment Facility, K-1417 Drum Storage Yard, and K-25 Building Storage Area. It addresses problems of current drum storage methods due to rapid drum corrosion and free liquids, drum demographics, storage status and options for the short and long term, risk and uncertainty factors, management and documentation requirements, quality assurance issues, and general conclusions and recommendations. Volume 2 consists of appendices supporting the first volume, including background data and information, sludge analyses results, a risk analysis, an outside grout feasibility report, and information and sludge flow charts. Cesium results are recorded in disintegrations per minute per gram and picocuries per gram (dpm/g and pCi/g).

Data Elements: 89, 103, 117, 124

K-1417 Drum Storage Yard Inspection Reports, 1993-1994 (noninclusive)

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: < 0.25 inches

Accession or Other ID Number: 1) (HS/93-1433); 2) (HS/93-1642); 3) (HS/93-1803); 4) (HS/93-1847); 5) (HS/93-2439); 6) (HS/93-2619); 7) (HS/93-3662); 8) (HS/94-2532)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of results of the visual inspections of the drum storage yards at K-1417 during 1993 and 1994. Besides the written account, diagrams have been marked to indicate drums that are leaking, falling over, or otherwise becoming hazardous.

[For similar inspection reports, see "RCRA Inspection Logs" in Chapter IV.]

Data Elements: 89, 117

[Report on the] K-1417 Investigation, 1990

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: (90:00178)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document is a compilation of material (noted in the report as historical data) related to a 1990 investigation of the K-1417 storage area. Information includes drum population data, sludge characteristics, sludge stabilization data, and cost data. Cesium measurements taken from the sludge characteristics are in disintegrations per minute per gram (dpm/g), and microcuries per gram. Also included are interoffice correspondence, Resource Conservation and Recovery Act [RCRA] analysis requirements, design criteria, and document lists.

Data Elements: 89, 117, 124

K-1417 Solidified Drums Draft Radionuclide Analysis, July 17, 1990

Location: 1. Active:
2. Inactive: K-1210 Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (ER001758)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: K-303-8 Room 13, Environmental Management Division Document Center

Arrangement: Numerical by file code/report number

Originating Office: Analytical Chemistry Department

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This is a document which provides the results of solidified sludge analyses from samples examined in April, 1990. It consists of a cover sheet and copies of the Analytical Chemistry Department analysis reports. The cover sheet lists the radionuclide, including cesium, range of results, simple averages, and Level-I classification limits for each one in picocuries per gram (pCi/g). The laboratory reports contain customer names and identification codes, sample analysis dates, material descriptions, batch numbers, activity and procedure numbers, analyses to be performed, results, limits of error, units, analysts names, "QA file numbers," and completion dates. Cesium results are measured in pCi/g.

Data Elements: 89, 95, 124

Part B Permit Application for Oak Ridge Gaseous Diffusion Plant [ORGDP], K-1417 Concrete Block Casting and Storage Area, September 1988

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 3.0 inches

Accession or Other ID Number: (H13-1.1.2, 88:00110)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains photographs and blueprints

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This Resource Conservation and Recovery Act [RCRA] permit application presents a general description of the K-1417 site under consideration; waste characteristics; waste process information (casting form data, drum size); monitoring plans, including frequency and analysis parameters; hazard prevention procedures, which include inspection schedules; security procedures; signs of deterioration/potential hazards; emergency contingency plans; personnel training procedures; and reporting procedures. The application also includes photographs and blueprint drawings of the site, early sampling results, and forms used for compliance with reporting procedures.

Data Elements: 88, 89, 103; 117, 118, 124

Phase 1 Hazard Screening Analysis for Building K-1417 Concrete Block Casting Shed and K-1417-A/B Drum Storage Yards, April 1992

Location: 1. Active:
2. Inactive: K-1001-B Room B-131, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: (HS/93-0818)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains photographs

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Plant Safety Evaluation Team

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1992 report documents the hazards associated with the K-1417 concrete casting and drum storage areas, which contain sludges from the K-1407-B and -C ponds. The layout of the area is described and photographed, and hazards are broken down into radioactive, toxic/corrosive, and nonradioactive carcinogenic materials. Safety documentation and hazard classifications are also discussed.

Data Elements: 88, 89, 117

Annual Summary of Hydrologic Data for the White Oak Creek [WOC] Watershed, August 31, 1987

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.5 inches

Accession or Other ID Number: ORNL/RAP/LTR/87-43 (ER007296)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and diagrams

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Remedial Action Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report summarizes the hydrologic data collected in the WOC watershed for use in characterizing water quality and supporting remedial action work and quality assurance needs. Most of the report focuses on water flow, quality, conductivity, pH, and the like. Some information regarding potential contaminants, including cesium, is discussed and noted in becquerels per liter (Bq/l).

Data Elements: 89, 103, 117, 118, 124

[Report on the] Association of Radionuclides with Streambed Sediments in White Oak Creek Watershed, September 1979

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: ORNL/TM-6895 (ER011170)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1979 report summarizes the results of sediment analyses done to locate unknown or little known sources of contamination in the White Oak Creek watershed prior to carrying out abatement measures. This is also a preliminary study to evaluate the potential for using streambed sediment analysis on a wider scale. The report discusses the use of several extractants (materials used to extract the contaminants from the sediments), strontium adsorption, sediment particle size, the results of the sediment survey, and the general summaries and conclusions to be drawn from the study. Results are in disintegrations per minute per gram (dpm/g) for cesium-137, and accompany sample numbers, locations, and sediment sizes (e.g. coarse gravel, fine sand, medium clay).

Data Elements: 89, 103, 124

Hydrologic Data Summary for the White Oak Creek Watershed at Oak Ridge National Laboratory [ORNL], 1990-1992

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: 1) ORNL/ER-123 (ER007347); 2) ORNL/ER-166 (ER012576)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Environmental Restoration Program, Environmental Sciences Division, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series consists of reports which summarize and analyze the hydrologic data on the White Oak Creek watershed, which are used to assess the practicality of certain long-term remedial actions. The reports contain information on discharge and run-off water quality (cesium is measured in curies), and climatological data on precipitation, temperature, humidity, wind, and solar radiation. Recommendations are made for the coming year. Detailed reference lists of support and background documents and appendices containing daily discharge, precipitation, and hydraulic control structure readings accompany the reports.

Data Elements: 89, 103, 124

Information Update: White Oak Creek Embayment, October 5, 1990

Location: 1. Active: K-1210, Environmental Restoration Program Document Management Center
2. Inactive:

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (ER-A1973)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs and a map

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series is a 1990 compilation of information, essentially acting as a summary document on White Oak Creek Embayment [WOCE] cesium contamination. Answers are provided to a number of questions about the recent discovery of elevated cesium levels (measured in picocuries per gram). A map indicates the locations of two previous studies and the current sampling area. Side-by-side graphs plot cesium amounts found in the sediment cores taken during these studies.

Data Elements: 103, 124

Inventory of Oak Ridge National Laboratory Removal Action Sites: 4. White Oak Creek Watershed, July 1986

Location: 1. Active: K-1210, Environmental Restoration Program Document Management Center
2. Inactive:

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/RAP/LTR-86/23/R1 (ER003769)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1986 report summarizes the history of the White Oak Creek watershed after the White Oak Dam was constructed and the laboratory and disposal activities which have contributed cesium and other radionuclides and contaminants to the area. Monitoring data from earlier research, remedial action activities, and further research recommendations are discussed. Monitoring and concentration data for groundwater, lake sediment, stream bed gravel, soil, and aquatic and terrestrial biota are measured in picocuries per gram and curies for cesium-137. Monitoring data may also include a date, location, and sample type, including soil, vegetation, and various animals.

Data Elements: 89, 118, 124

[Report on] Piezometer Sampling and Testing in the White Oak Creek Flood Plain, July 31, 1987

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL/RAP/LTR-87/36 (ER010419)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains a map

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1987 report summarizes the activities surrounding the construction and analysis of shallow piezometer wells in the White Oak Creek flood plain. It documents water analysis and conductivity testing done on samples taken from the wells. Sampling and testing procedures are summarized, well construction and locations are documented, and the results of the analyses are discussed. Results are laid out in tables, which include the parameter, measurement unit (becquerels per liter for cesium), well number, and maximum allowable levels. A list of reference documents and an appendix containing construction data are also included. A map indicates the locations of wells in the flood plain.

Data Elements: 89, 103, 118, 124

Specifications for Sediment Control Structure--White Oak Creek Embayment [WOCE], X-10 Facility, Oak Ridge, Tennessee, [1991?]

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: ORNL/ ER-001849 (ER001849)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains blueprints

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document consists of specifications submitted for the construction of a sediment-control structure on White Oak Creek. It describes the specifications for equipment, materials, installation, and quality assurance. Detailed engineering drawings of the structure are also included.

Data Elements: 89, 117

Water Quality Monitoring Report for the White Oak Creek Embayment [WOCE], January 1993

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/ ER-150 (ER010165)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs

Duplication: K-1200, K-25 Site Document Response Center; [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division, Clinch River Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1993 report focuses on the results of water-quality monitoring activities done in the White Oak Creek [WOC] area in conjunction with the WOCE time-critical CERCLA [Comprehensive Environmental Response, Compensation, and Liability Act] removal action. It documents sampling and analysis results for cesium, primarily in picocuries per liter or becquerels per liter (pCi/l or Bq/l). The sampling occurred before, during, and after construction of the embayment to help determine the effectiveness of the embayment in reducing the amount of sedimentation and contamination released into the Clinch River. Background and construction information and WOC location maps are included, as are graphs and data tables which show the results of sampling analyses and that list pH, temperature, turbidity, cesium level, test date, measurement unit, location, sample type, construction phase, and an error figure.

Data Elements: 89, 103, 116, 118, 124

White Oak Creek Embayment [WOCE] Site Characterization and Contaminant Screening Analysis, January 1993

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/ ER-81 (ER010055)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and graphs

Duplication: K-1200, K-25 Site Document Response Center; [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division, Clinch River Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report summarizes sediment analyses of samples taken from White Oak Creek during 1990. The samples revealed cesium-137 contamination near the sediment surface, and the analyses provided a more thorough characterization of the contamination than previous sampling had done. Appendices include background information about the area, the screening approach used, a list of pertinent reference documents, and contaminant data for radionuclides, organics, and inorganics. Cesium activity is recorded in curies, or picocuries or becquerels per liter (Ci, pCi/l, or Bq/l). Concentration summaries, depth profiles, exposure rates (in microRoentgen per hour), and other data are given.

Data Elements: 89, 103, 117, 118, 124

White Oak Creek Embayment [WOCE] Time-Critical Comprehensive Environmental Response, Compensation, Liability Act [CERCLA] Removal Action Emergency Contingency Plan, June 19, 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: ORNL/ER/WOCE-19 (ER001102)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: White Oak Creek Embayment Project, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1992 report outlines the objectives and activities of the WOCE Project. It supplies background information, a site characterization summary, the monitoring approach which was used, and a time-line of project activities. The bulk of the report comprises a contingency plan to be set in motion in case of an emergency to prevent endangering human health or the environment. This section describes lines of authority; emergency situation recognition; evacuation procedures; medical concerns; plans for fire, spills and flooding; and reporting procedures. Cesium, a major contaminant in the sediment of White Oak Creek, is discussed frequently throughout the report. Measurements are given in picocuries per gram (pCi/g).

Data Elements: 3, 89, 103, 118, 124

White Oak Creek Embayment [WOCE] Time-Critical Comprehensive Environmental Response, Compensation, Liability Act [CERCLA] Removal Action Sediment-Retention Structure, September 1992

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL/ER/Sub/91-KA931/4 (ER008670)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1992 report describes the activities associated with a time-critical removal action around the WOCE sediment-retention structure as required under CERCLA. The report includes a summary of events, budget data, treatment technologies, community relations activities, a reference list of relevant documents, a list of public notices which appeared during construction, charts, diagrams of the Creek watershed, retention structure drawings, and cesium distribution data in picocuries per gram (pCi/g).

Data Elements: 89, 103, 124

White Oak Creek Embayment [WOCE] Time-Critical Comprehensive Environmental Response, Compensation, Liability Act [CERCLA] Removal Action Water Quality Monitoring Plan, May 23, 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: ORNL/ER/WOCE-018 (ER001101)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams, charts, and maps

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: White Oak Creek Embayment Project, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report outlines the water monitoring efforts of the WOCE Project. It provides background information about the project; the scope and objectives of the monitoring plan; coordination efforts with other groups and agencies; sample collection strategies; the sampling schedule; testing, quality assurance, and quality control parameters; and other requirements necessary to implement the monitoring program. Cesium, a major contaminant of the White Oak Creek area, is frequently mentioned. Measurement units are usually in picocuries per liter (pCi/l).

Data Elements: 89, 95, 103, 118, 124

White Oak Creek Embayment [WOCE] Time-Critical Comprehensive Environmental Response, Compensation, Liability Act [CERCLA] Removal Action Water Quality Removal Plan, May 23, 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: (ER010079)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts, maps, and form samples

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division, Off-Site Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1991 document outlines the water-quality interim corrective measures [ICM] monitoring plan for the WOCE. Outlined are a site characterization; scope and objectives of the work; coordination activities among the involved agencies and individuals; monitoring station locations; sample parameters; sample retrieval strategies which include frequency, responses to unpredicted events, and QA/QC data; equipment calibration and maintenance requirements; and requirements for records and data quality and management, shipping, and identification. Included in each section are copies of the necessary forms used for these activities.

Data Elements: 89, 95

White Oak Creek Embayment [WOCE] Time-Critical Removal Action Administrative Records, [1990-1991]

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: 1) ORNL/ER/WOCE-001; 2) ORNL/ER/WOCE-002; 3) ORNL/ER/WOCE-003; 4) ORNL/ER/WOCE-004; 5) ORNL/ER/WOCE-005; 6) ORNL/ER/WOCE-007; 7) ORNL/ER/WOCE-008; 8) ORNL/ER/WOCE-0010; 9) ORNL/ER/WOCE-0011; 10) ORNL/ER/WOCE-0013; 11) ORNL/ER/WOCE-0014

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: White Oak Creek Embayment Project, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series is a group of administrative documents related to the discovery of higher-than-expected levels of cesium-137 in the sediments of White Oak Creek, Lake, and Embayment. Included are the initial occurrence report; a press release announcing the discovery and corrective action plans; various correspondence and internal memoranda between the Environmental Restoration Program, Tennessee Department of Health and the Environment, the Environmental Protection Agency, and the Department of Energy; and the documents proposing the time-critical removal action. When cesium measurements are given, they are either in picocuries per gram or curies per gram (pCi/g or Ci/g).

Data Elements: 89, 118, 122, 124

Active Sites Environmental Monitoring Program: Fiscal Year Reports, October 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: 1) ORNL/TM-1327 (ER005549); 2) ORNL/M-1442 (ER00548)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts and well diagrams

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: These reports document environmental monitoring activities at the Tumulous I pad and Solid Waste Storage Areas 5 and 6 [SWSAs 5&6]. Narrative portions present site hydrology, monitoring methodology and activities, results summaries, and general recommendations for future monitoring. Appendices include maps and diagrams of the sites, indicating trenches, pits, and monitoring wells, and tables which list the results of the monitoring efforts. These may include a sample number, date, pH, gross alpha, gross beta, and cesium-137 activity readings in becquerels per liter (Bq/l). Lithologic logs of well areas and a list of reference documents are also included.

Data Elements: 89, 103, 117, 124

Discharge Monitoring Report and National Pollutant Discharge Elimination System [NPDES] Effluent Data for the Oak Ridge K-25 Site, February 1992

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: (H13-1.4.7, 92:00336)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report contains the discharge monitoring records for various locations on K-25 for the NPDES. It documents the discharge number, monitoring period, sample type, analysis frequency, and other parameters such as temperature, turbidity, pH, oxygen, and nonradioactive contaminants (e.g., solids, oil, fluorides, lead). One section lists radioactive discharges and their total activity, in picocuries per liter (pCi/l). Those that exceed a certain level are examined for specific radionuclide content (e.g., cesium, tritium, strontium).

Data Elements: 103, 119, 124

Environmental Levels of Radioactivity for the Oak Ridge Area Reports, 1959-1968

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: [Unknown]

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams and maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Applied Health Physics Section, Health Physics Divisions

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series consists of reports (generated annually, semi-annually or quarterly from 1959 to 1968) which document the monitoring of the Oak Ridge area's environment for radioactivity. Both onsite and offsite stations tested water, air, soil, and food sources for various contaminants, measuring alpha, beta and gamma activity, and levels of cesium, strontium, cobalt, iodine, and uranium. Measurement units vary, but may be microcuries per cubic centimeter, picocuries per liter, or particles per square foot. Tables, maps, and diagrams give sampling locations including Y-12 East Portal, Gallaher Gate, the Clinch River, Turnpike Gate, and offsite locations such as Norris Dam, Watts Bar Dam, and Berea, Kentucky.

Data Elements: 89, 103, 116, 117, 118, 124

Environmental Monitoring Reports: US ERDA Oak Ridge Facilities, 1971-1984

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center; K-1200, K-25 Site Document Response Center

Access Restrictions: Unclassified; internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: 5.5 inches

Accession or Other ID Number: 1) (H13-6, 73:00005); 2) (H13-6, 74:00011); 3) (H13-6, 75:00005); 4) (H13-6, 76:00006); 5) (H13-6, 77:00004); 6) (H13-6, 78:00003); 7) (H13-6, 79:00007); 8) (H13-6, 80:00013); 9) (H13-6, 81:00013); 10) (H13-6, 82:00009); 11) (H13-6, 83:00011); 12) (H13-6, 84:00065); [unnumbered]

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center databases

Disposition Authority: N/A

Series Description: The Energy Research and Development Administration [ERDA] annual reports in this series describe the collection, analysis, and evaluation practices of the monitoring activities at the Oak Ridge facilities for external gamma, air, water, food, vegetation, soil, and sediments. Each report also contains a summary of the findings. Public radiation doses are also calculated. Station numbers and locations, the number of samples taken, maximum, minimum, and average readings, and %CG (concentration guide) are given for radiochemicals, including cesium. Measurements for radionuclides are given in microcuries per milliliter.

Data Elements: 89, 95, 103, 117, 118, 124

Groundwater Monitoring at Three Oak Ridge National Laboratory [ORNL] Inactive Waste Impoundments Reports, October 1986, March 1989

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: 2) ORNL/TM-10193 (ER006776); 2) ORNL/TM-11022 (ER004081)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams and charts

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Nuclear-Chemical Waste Programs, Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: These reports summarize the results of groundwater analyses at three sites at ORNL, which were conducted to determine the migration potential of contaminants from the sites to area groundwater. The three sites under surveillance were: 1) 3513 Impoundment; 2) Old Hydrofracture Facility; and 3) Homogeneous Reactor Experiment No. 2 Impoundment. Samples were collected from monitoring wells installed in 1985 and analyzed on a quarterly basis for parameters under Resource Conservation and Recovery Act [RCRA] compliance. The report describes the three sites; the locations and construction of the monitoring wells; sample collection, preservation, and custody procedures; test parameters; methods of analysis; statistical procedures; and the results from each site. The report offers a general summary and conclusions, and the appendix lays out the contaminant concentrations found. It lists the parameter, well number, maximum, minimum, and mean concentration levels, and the regulated concentration limit where applicable. Cesium readings are measured in becquerels per liter (Bq/l).

Data Elements: 89, 95, 103, 124

Oak Ridge Gaseous Diffusion Plant [ORGDP] Monitoring Reports, 1973, 1975-1981 (noninclusive)

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 1.5 inches

Accession or Other ID Number: [Unknown]

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of monthly reports documenting the sampling results at sites throughout the ORGDP. The reports do not specify the type of samples which were tested. They indicate sampling location, parameters, concentration readings in milligrams per liter (mg/l), and the number of samples which exceed standard limits. [Limits are defined in the permit documentation noted on the page bottom where they are applicable.]

Data Elements: 103, 124

Oak Ridge Reservation Environmental Report, 1992

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: (93:02424)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and diagrams

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental, Safety and Health Compliance and Environmental Management Divisions

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 2-volume bound report summarizes the environmental activities and status for the entire Oak Ridge Reservation. Air, soil, ground and surface water, and biological monitoring (especially for radioactivity) are discussed, as are water management, quality assurance, and special activities. Annual emissions of radioactive elements (e.g., cesium, iodine, xenon, krypton) are recorded, and monitoring locations at all three sites and some offsite areas are noted. Measurement units vary, but are generally picocuries per liter or per gram (pCi/l or pCi/g). Potential radiation doses to the public are also covered in the report.

Data Elements: 89, 103, 117, 118, 124

Radioactive Effluent and Onsite Discharge Reports, 1985-1988

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: 1) (H15-1.4, 86:00089); 2) (H15-1.4, 87:00096); 3) (H15-1.4, 88:00019); 4) (H15-1.4, 89:00092)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series consists of the annual monitoring reports which record the nuclides present in liquid and air effluents and discharges at monitoring sites around the Oak Ridge Gaseous Diffusion Plant [ORGDP]. The reports identify the discharge point location, report period, and nuclide data (description, concentration/amount, measurement unit--usually curies, and solubility). The storage/disposal facility start-up date and operational status may also be noted. A map indicates the location of each monitoring site. Several pages of handwritten data and calculations related to the final report are also included.

Data Elements: 103, 117, 118, 124

Report of Health Physics Activities, 1947-1948

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 1.5 inches

Accession or Other ID Number: [Unknown]

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: K-25 Health Physics Department

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series consists of the monthly activities reports of the Health Physics Department of K-25. These reports indicate the general results of routine and spot radiation inspections for air, water, personnel, and area monitoring. Special investigations and monthly education/training activities are also included. Sampling analyses vary in level, but generally give the number of samples taken and the numbers that fell above or below a certain acceptable level (in milligrams per cubic meter) for each of several analytes (e.g., uranium, mercury). Reports are for October 1947, December 1947, May 1948, and December 1948.

Data Elements: 68, 81, 89, 103, 124, 122

Second Annual Report of the Environmental Restoration Monitoring and Assessment Program at Oak Ridge National Laboratory [ORNL], 1992-1993

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: 1) ORNL/ER-125 (ER014647; W2-00977); 2) ORNL/ER-180 (ER013775)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams and graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division, Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report informs regulators, the Department of Energy, and the public of the 1992-1993 year's efforts of environmental monitoring and field investigations done in support of the Environmental Restoration Program at ORNL. After describing the ORNL site, its program objectives and organization, the report focuses on the Waste Area Grouping 2 [WAG-2] and the Site Investigations program, as well as other remedial investigations/feasibility studies for ORNL and National Pollutant Discharge Elimination System [NPDES] and compliance monitoring. Data related to the monitoring of surface water, groundwater, soil/sediment, and biota are summarized, assessed to determine human health and environmental risks, and prioritized for remedial actions. Specific topics include the hydrologic system, contaminants of concern by WAG or site, and contaminants of concern by pathways. Tables indicate sample location, contaminant, media (soil, biota), and analysis results. Cesium is measured in curies (Ci), percentage of Derived Concentration Guide (%DCG), and picocuries per liter (pCi/l). Charts plotting these results, diagrams indicating sampling locations, a summary of findings, a summary of upcoming activities, and an extensive reference list are also included. The appendix consists of tables of contaminants listed by WAG and sampling site.

Data Elements: 3, 89, 103, 117, 118, 122, 124

Characterization of Selected Liquid and Solid Waste Effluents at the ORGDP, January 10, 1979

Location: 1. Active:
2. Inactive: K-1200, Quality Division Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K/ET-121

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Materials & Chemistry Technology Department, Enrichment Technology Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1979 report presents accumulated data on the make-up of liquid and solid waste effluents at K-1407-C, K-1401, K-1413, K-1501, and K-1301. Sample locations are identified by a number, with results given in percentages or parts per million (ppm). Graphs indicating particle size are also included.

Data Elements: 89, 103, 116

[Listing of] Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] Reportable Quantity Exceedances for Radiological Effluents, November 1989

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: H13-1.2 89:00040 (01915)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Waste Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document lists the radioactivity levels in effluents from disposal/burial sites around the Oak Ridge Gaseous Diffusion Plant [ORGDP]: the K-770 scrap metal yard, K-1203, K-1700, K-1007, and K-901-A sites. The reportable level for each isotope is listed, as is the actual yearly discharge in curies and the Derived Concentration Guide (DCG) in picocuries per liter (pCi/l).

Data Elements: 103, 124

Data Evaluation Technical Memorandum on K-1070-A Contaminated Burial Ground, Oak Ridge K-25 Site, Oak Ridge, Tennessee, April 1991

Location: 1. Active:
2. Inactive: K-1200, Quality Division Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: K/ER-42 (00241)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; document contains maps and diagrams

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Restoration and Waste Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report discusses the results of analyses of soil samples taken from the K-1070-A Contaminated Burial Ground. It presents information on the geography and hydrogeography of the site with maps and diagrams, locations of the monitoring wells, borehole data from soil sampling, site background readings, sample analyses results, and recommendations for further sampling parameters. Also included is a reference list of background documents.

Data Elements: 95, 124

Evaluation of 1985-1986 Corrective Actions at Oak Ridge National Laboratory [ORNL] Liquid Waste Disposal Trench 7, April 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/TM-11793 (ER000103176)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains photographs and diagrams

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report evaluates the efficacy of corrective actions taken at Trench 7 to reduce the discharge of radionuclides, primarily by injecting grout into the soil. The report outlines the history of the trench; problems associated with it prior to corrective actions; the corrective grouting activities and results, including post-injection monitoring results; and conclusions. Monitoring data tables include a sample identification, well number, and results for several parameters, including cesium-137, cobalt-60, strontium-90, and gross alpha and beta activity in becquerels per liter (Bq/l). Appendices include grout specifications and the proposal reports. Photographs illustrate the trench during and after construction and the surrounding area.

Data Elements: 89, 103, 124

[Report on] Groundwater Quality at the ORGDP, October 1989

Location: 1. Active:
2. Inactive: K-1200, Quality Division Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: K/SUB/85-22224/11

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and diagrams

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1989 report discusses groundwater quality at the ORGDP based on monitoring at several places throughout the site over a period of four years [presumably the four years preceding the final report]. Locations were the K-1232 Treatment Units, K-1070-B Classified Burial Ground, K-1407-A Neutralization Pit and K-1407-B Pond, K-1407-C Pond, K-1413 Waste Area Grouping, K-1070-C/D Classified Burial Ground, K-1099 Blair Road Quarry, K-770 Scrap Yard, K-1064-G Burn Area/Peninsula Storage, K-1085 Firehouse Burn Area, K-1070-A Contaminated Burial Ground, and the K-1070-F Old Contractor's Burial Ground. Report information includes radiochemical parameters for each area, monitor well names and locations, and quality results for specific wells. Alpha, beta and radiochemical activity is measured in picocuries per liter (pCi/l).

Data Elements: 89, 103, 117, 124

Laboratory Division Monthly Activities Report for June 1975

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Secret/Restricted Data. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K-TL-430-12-28

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Classification and Technical Information Department, Laboratory Division

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This report of July 15, 1975, lists major activities and project status for the Laboratory Division of K-25 during the previous month. Barrier and Materials Evaluation, Chemical Analysis, Classification and Technical Information, Isotopic Analysis, and Vendor and Equipment Evaluation Departments are included. Of primary interest is the activity summary from the Radioanalysis section of the Isotope Analysis Department which discusses the testing of soil samples for cesium-137 after unexpected levels were detected during a plant inspection.

Data Elements: 89, 122

Oak Ridge Gaseous Diffusion Plant [ORGDP] Health Physics Monthly Activities Report for September 1975, October 29, 1975

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K-TL-535-3-4

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Health Physics, Laboratory Division

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This 1975 report of the monthly activities of the Health Physics Department at K-25 includes the status of a clean-up effort involving cesium-contaminated soil onsite.

[See also: ORGDP-HP Monthly Activities Report for July 1975.]

Data Elements: 89, 122

Radioactive Effluent Data, March 16, 1983

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Division Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2 pages

Accession or Other ID Number: (HS/83-0056)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 2-page report sets out the liquid and gaseous radioactive effluent releases for 1981 and 1982 for Oak Ridge National Laboratory, Oak Ridge Gaseous Diffusion Plant, Paducah Gaseous Diffusion Plant, and Y-12. The report does not indicate how the effluents were released. The nuclides present are listed with readings in curies for each year. No locations for the readings are given.

Data Elements: 103

Radioactivity Analysis Results, January-May, 1992

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (H13-1.6, 92:00851)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Management Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report consists of analyses of K-25 drinking water and effluents released to the environment during January through May 1992. It includes the Derived Concentration Guides (DCG) in percentages for liquid waste discharges to surface waters and drinking water limits and activity levels for various analytes, including cesium and radioiodine, in picocuries per liter (pCi/l). The drinking water sample analyses were conducted at the Tennessee Public Health Department and results include sample date, type, and time.

Data Elements: 103, 124

Radiochemical Quality of Groundwater at the Oak Ridge K-25 Site, May 1993

Location: 1. Active:
2. Inactive: K-1210 Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: K/ER-76 (ER016729)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and tables

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Oak Ridge Gaseous Diffusion Plant Environmental Restoration Program, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This May 1993 report is an evaluation of data related to radiochemicals detected in groundwater samples taken from the K-25 site with general conclusions about future groundwater monitoring. Essentially, samples with single high alpha or beta readings were not necessarily to be automatically analyzed for radionuclide components unless the mean alpha/beta readings for the location are higher than allowable levels. The bulk of the report consists of well/sampling location maps and data tables that give well number, well location, sampling date (various dates from 1987-1992), gross alpha and gross beta readings, and readings (if done) for individual radionuclides, including cesium, strontium, technetium, and uranium, with readings given in picocuries per liter and "CE+/-" [corrected error?].

Data Elements: 89, 103, 124

A Ranking of Contaminant Sources in the White Oak Creek Drainage, April 28, 1986

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center; K-1200, K-25 Site Document Response Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: 1) ORNL/RAP/LTR-86/39 (ER003765); 2) RAP86-39

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams and graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report focuses on sources of contamination in the drainage of White Oak Creek based on surveys done in July and August 1985. Major sources for each of four contaminants are given. For cesium, the main source is the Process Waste Treatment Plant. The bulk of the document consists of tables which show "Indicator Calculations of WOC Active Fluxes." These indicate site, volume, and flow during the study period, and concentration levels of zinc, cobalt-60, strontium-90, and cesium-137 in becquerels per kilogram (Bq/kg). A discussion of the chemistry of the contaminant metals in the watershed is included.

Data Elements: 89, 103, 117, 124

Results of the Mobile Gamma Scanning Survey of the Oak Ridge Gaseous Diffusion Plant [ORGDP], August 1990

Location: 1. Active:
2. Inactive: K-1001-B Room 131-B, Health & Safety Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: (HS/90-0984)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Pollutants Assessment Group

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report contains the results of a gamma radiation scan done on the ORGDP site, which searched for cesium, radium, depleted uranium, and other anomalies. The report, by element, documents the locations where the radionuclides were detected, distances traveled by the scanner, and any related remarks. Maps of the site are also included. The report indicates the locations of anomalous readings but not the amounts of radioisotopes detected.

Data Elements: 95, 103, 124

[Report on the] Sampling and Analysis of Solid Waste Storage Area 6 [SWSA-6] Trench Leachates and Groundwater, December 1988

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: ORNL/TM-108131 (ER005360)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs, charts, and maps

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1988 report summarizes the monitoring activities conducted to gather information about contaminant transport from trenches and auger holes in the SWSA-6. Area hydrology is discussed as are sample collection, analysis methodologies, field analysis requirements, and protocols. Cesium, gross beta, and gamma activity levels are given in becquerels per liter (Bq/l).

Data Elements: 89, 103, 124

Solid Waste Storage Area 6 [SWSA-6] Interim Corrective Measures [ICM] Environmental Monitoring Reports, November 1989, July 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/M-2009 (ER007628)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts and graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Environmental Restoration Program, Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: These reports document the results of environmental monitoring activities from October 1988 to October 1989 near the SWSA-6 burial trenches as part of the interim corrective measures [ICM] to meet Resource Conservation and Recovery Act [RCRA] compliance requirements. The July 1991 report specifically documents monitoring that followed the ICM installation of polyethylene caps on the trenches. The reports discuss the objectives of the Environmental Monitoring Plan; study plans for groundwater, meteorology, surface water, and stream sediments; previous study results; the potential for the ICM to spread radioactivity beyond the perimeters of SWSA-6; and conclusions and recommendations regarding future monitoring efforts. Monitors examined, among other things, leachate samples for radiological and chemical contaminants, monitoring-well water levels, and intratrench-well water levels before, during, and after construction. Results tables may include sample location, date or time from baseline date, results in becquerels per liter or per kilogram (Bq/l or Bq/kg), and sediment grain size. Appendices include water-level and meteorological data, testing procedures, and plot graphs and diagrams which further illustrate results.

Data Elements: 89, 103, 116, 124

[Report on] Surface Radiological Investigations at Pits 2, 3, 4 and Environs, December 1989

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL/RAP/LTR-89/21 (ER011210)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Measurement Applications and Development Group for the Health and Safety Research Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report contains the results of a radiological investigation at ORNL pits 2, 3, and 4 between January and May 1989. The investigation was designed to determine the nature and extent of radiological contamination and then to recommend corrective measures to prevent human exposure and contaminant transport. The report includes a site history for each of the pits; survey scope and methods used for the gamma and beta-gamma activities; results, which indicate the sample identification, location, depth, and activity levels; corrective action recommendations (contaminant isolation, removal); a list of pertinent references; and diagrams of the pit areas showing sample locations. Cesium results are recorded in picocuries or becquerels per gram (pCi/g or Bq/g) while gamma exposure rates are in microrems per hour.

Data Elements: 89, 103, 117, 124

Surface Water and Sediment Sampling for the Oak Ridge National Laboratory [ORNL] Waste Area Grouping 6 [WAG-6] "RFI" (Phase I, Activity 2) Technical Memorandum, January 15, 1991

Location: 1. Active:
2. Inactive: ORNL Building 1505, Room 359, Clinch River Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.75 inches

Accession or Other ID Number: Technical Memo 06-05A (W2-01036)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: By bar code number

Originating Office: ORNL Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This memorandum lists the results of surface water and sediment sampling and analysis at WAG-6, which was performed from 1989 to 1990. Listed are the sampling locations, methods and procedures, and summarized results. Cesium appears in the sediment sampling data, with results measured in picocuries per gram (pCi/g). Data tables, graphs, and location maps are also included.

Data Elements: 103, 124

[Letter on] Cesium-137 Contamination, June 26, 1986

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 2 pages

Accession or Other ID Number: (300659)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Radiological Survey Activities Group

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This letter from R.D. Foley to G.E. Kemp reports on a preliminary investigation for cesium contamination along the railroad tracks at Scarborough Road near Y-12. The nature of area gravel is commented on, as is the 120-yard section where cesium contamination was found, with cesium readings given in picocuries per gram (pCi/g) and gamma exposure in milliRoentgen per hour (mR/h). The letter concludes with general recommendations for further investigation and possible remedial action.

Data Elements: 103, 118, 122

[Letter on an] Offsite Residential Drinking Water Program, October 19, 1988

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: [Unknown]

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This is a single letter regarding offsite residential well water near K-25 from an unspecified author. Historical monitoring data, from testing done in 1981 and 1983 is summarized in a table accompanying the letter and compared to appropriate background contamination limits. For instance, the maximum observed concentration measured in milligrams per liter or picocuries per liter (mg/l or pCi/l), is compared against acceptable limits, which for cesium is 200 pCi/l. The letter mentions the existence of offsite wells and includes a summary of the current onsite groundwater monitoring program and plans for offsite monitoring in the future.

A similar letter regarding the Portsmouth Gaseous Diffusion Plant is attached to the back of the Oak Ridge Gaseous Diffusion Plant letter.

Data Elements: 89, 103, 118

[Report on the] Preliminary Screening of Contaminants in the Off-Site Surface Water Environment Downstream of the U.S. Department of Energy Oak Ridge Reservation, November 1991

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 6 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/ER-9 (91:00529)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code

Originating Office: Energy Systems Environmental Restoration Program

Finding Aids: Document center database.

Disposition Authority: N/A

Series Description: This 1991 report describes conservative and nonconservative screening methods used to determine which contaminants that eventually reach the Clinch and Tennessee rivers through tributary branches should be considered high priority for remediation. The following 8 "reaches" (areas) were evaluated: Melton Hill Reservoir (Y-12); Clinch River from the Poplar Creek effluence to Melton Dam (ORNL, Y-12); Poplar Creek from mouth to confluence with East Fork Poplar Creek (Y-12, ORGDP); Clinch River from mouth to confluence with Poplar Creek (ORNL, Y-12, ORGDP); Watts Bar Reservoir from Watts Bar Dam to confluence with the Clinch River (ORNL, Y-12, ORGDP); Norris Reservoir (reference); Poplar Creek above confluence with East Fork Poplar Creek (reference); and the Tennessee River from confluence with the Clinch River to Fort Loudon Dam (reference). Drawings of these areas are provided.

[Report on the] Preliminary Screening of Contaminants in the Off-Site Surface Water Environment Downstream of the U.S. Department of Energy Oak Ridge Reservation, November 1991 (continued)

Series Description (continued)
Results are provided by contaminant in five tables in the appendices. The data in the tables include the reach number, the pathway, toxicity type, and measurement unit, which may be one of the following: milligram per liter, milligram per kilogram, becquerels per kilogram, becquerels per liter, sieverts per becquerel, sieverts per disintegration, becquerel per square meter, or milligram per kilogram per day (mg/l, mg/kg, Bq/kg, Bq/l, Sv/Bq, Sv/d, Bq/m^2, mg/kg/day). Cesium-137 is included in the first five tables. The appendices also discuss health risks/concerns for workers and local populations.

Data Elements: 103, 118, 124

[Report on] Radiation Exposures from a Cesium-Contaminated Field, June 17, 1988

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL/RAP-46

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams and maps

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code

Originating Office: Environmental Measurements and Applications Program, Health & Safety Research Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document reports the results of a 1988 survey conducted to determine the extent of cesium contamination remaining in a field used for a fallout study in 1966. The report describes the field physically, the methods used during the survey to obtain readings, usual background readings, and survey results. The report also discusses potential exposure scenarios for workers and the general population and makes recommendations for treatment and further monitoring of the field.

Data Elements: 89, 103, 117, 122, 124

[Data on] Radioactivity in Clinch River Water, March-May 1962

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 6 document center access restrictions.

Volume: 3 letters

Accession or Other ID Number: [Unknown]

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: K.Z. Morgan--Safety & Health Physics Department

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of three letters from K.Z. Morgan to A.F. Becher, consisting of monthly contamination readings from Clinch River water in 1962. Data includes the total number of curies released; weekly breakdowns by gross alpha, beta, and maximum permissible concentration (MPC), in counts per minute per milliliter (c/m/ml) and microcounts per cubic centimeter (uc/cc); and a radiochemical analysis of the White Oak Lake effluent. Cesium is listed in this analysis.

[Similar documents may exist in ORNL Central Files or K.Z. Morgan's files.]

Data Elements: 103, 118

Removal Action Work Plan for the CSX Railroad Site in Oak Ridge, Tennessee, November 1993

Location: 1. Active: from Sheila Thornton, K-25 Site TOA Coordinator
2. Inactive:

Access Restrictions: Unclassified

Volume: 0.5 inches

Accession or Other ID Number: [Not indicated]

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and diagrams

Duplication: Unknown

Arrangement: N/A

Originating Office: Radian Corporation (contractor) for the Department of Energy

Finding Aids: N/A

Disposition Authority: N/A

Series Description: This report outlines a 1993 work plan for removing cesium-contaminated soil from two areas along the CSX railroad tracks in the Oak Ridge area. The plan for the Scarborough Road and Warehouse Road sites defines the responsibilities of the Department of Energy, Martin Marietta Energy Systems, CSX, and other involved parties, and details the procedures to be followed during site preparation, excavation, decontamination, and restoration. Maps and diagrams show the site configurations and the extent of the contamination.

Data Elements: 89, 103, 122

Survey Report for the Characterization of Radiological Contamination of the CSX Railroad Tracks, September 1990

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: ORNL/ER-001526

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains handwritten data and diagrams

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code

Originating Office: Pollutant Assessment Group

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1990 report documents the results of a survey done along the CSX tracks on the Reservation to determine the extent and type of radiological contamination present, in this case, cesium-137. Procedures are outlined for surveying and sampling and results, in microRoentgen per hour and picocuries per gram (pCi/g) are given. Survey data sheets are included in the appendix, along with quality assurance, risk assessment, personnel protection, and other activity management information.

Data Elements: 89, 103, 117, 118, 122

[Compilation of] Historical Background on Oak Ridge National Laboratory [ORNL] Pits and Trenches: 1. Liquid Waste Disposal at ORNL, [no date]

Location: 1. Active:
2. Inactive: K-1210 Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: (ER011322)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains diagrams

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This draft document appears to be a compilation of other documents and excerpts of narratives and data charts which tell the history of liquid waste disposal at ORNL. Each of the pits and trenches is described in detail, with operation dates, volume, gallons of waste, and amount of activity, in curies (Ci), delineated by radiochemical. Diagrams indicate the location of each pit and trench. A representative table indicates the number of gallons of waste sent each month, from October 1962 to April 1966, to each area and the amount of radionuclides present.

Data Elements: 89, 120, 124

[Report on] Historical Radionuclide Releases from Current Department of Energy Oak Ridge Operations Office Facilities, 1988; 1991

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: OR-890 (00390)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report records the radionuclide releases at all facilities under the aegis of the Oak Ridge Operations Office, including Y-12, K-25, and ORNL, from 1944 to 1987. It shows that cesium releases occurred almost entirely at ORNL; charts detail ORNL releases and burials. The report also discusses the general health risk and dose exposure to the local populations. It includes updates and changes to release data for 1988-1989 in a 1991 addendum.

Data Elements: 88, 103, 119, 122

Inventory of Oak Ridge National Laboratory [ORNL] Remedial Action Sites: Low-Level Waste [LLW] Seepage Pits and Trenches, June 1986

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: ORNL/RAP/LTR-86/27R1 (ER003757)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains copies of photographs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1986 report consists of brief histories of the operation and use of burial pits and trenches for radioactive liquid waste disposal at ORNL between 1951 and 1966. Descriptions of construction and operation methods, site characteristics, waste discharge rate data, nuclide retainment issues, and current radionuclide inventories are discussed and hazard ranking scores and recommendations are given. Inventories are measured in curies for all radionuclides, including cesium.

Data Elements: 89, 120

Inventory of Radioactivity Released to Onsite and Offsite Environments, January 17, 1974

Location: 1. Active:
2. Inactive: K-1200, Quality Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: (800803)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Safety & Environmental Protection Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1974 inventory of released radioactive materials at Oak Ridge Operations facilities summarizes monitoring, discharge, and waste data from approximately 1944 to 1974. Releases to air, water, and burial and hydrofracture facilities for uranium, cesium, strontium, and other radionuclides are laid out in tables. Measurements are given in curies (Ci).

Data Elements: 89, 120, 103

Oak Ridge Gaseous Diffusion Plant [ORGDP] Historical Uranium and Radionuclide Release Report, February 28, 1986

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: K/HS-95

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Management Department

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1986 report documents the historical release of uranium and other radionuclides at K-25 from 1946 to 1984. The data has been divided into three main release types: airborne, liquid effluent, and solid waste burial. Diagrams indicate monitoring station locations while tables for each radionuclide, including cesium, indicate the levels present at various monitoring sites. Measurements are recorded in picocuries per gram (pCi/g).

Data Elements: 89, 103, 124

[Report on] Oak Ridge National Laboratory [ORNL] Radioactive Liquid Waste Disposal Pits and Trenches: History, Status, and Closure Characterization Needs, September 1985

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: ORNL/CF-85/70 (ER003112)

Condition: Good

Container Numbers: N/A

Medium: Paper, photographs

Scanning Suitability: Not entirely suitable; contains photographs, drawings, graphs, and charts

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Nuclear and Chemical Waste Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1985 report pulls together ORNL's collective knowledge about the history and use of the seven waste burial pits and trenches used at ORNL from 1951 to 1966. For each of the seven sites, it contains an operational history of monitoring needs; waste forms transferred in site characterizations (i.e., components of waste like cesium and cobalt in disintegrations per minute per milliliter, becquerels per liter, or microcuries per milliliter), regulatory and environmental concerns, and a list of references. Five appendices provide related data: a bibliography, excerpts from routine progress reports of the Operations Division concerning the pits and wastes, and drawings and photographs of the pits and trenches.

Data Elements: 88, 89, 103, 117, 124

[Report on] Radioactive Waste Disposal Areas and Associated Environmental Surveillance Data at ORNL [Oak Ridge National Laboratory], December 1979

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL/TM-6893 (ER001573)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs and charts

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Environmental Surveillance and Evaluation Section, Industrial Safety and Applied Health Physics Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1979 report focuses on the use of solid radioactive waste disposal areas [SRWDAs] at ORNL and historical monitoring data associated with them. Monitoring systems and liquid discharge trends are discussed. The operating history of each of six disposal areas at ORNL (indicated on a map), along with a physical description, operating dates, and a brief summary of any previous environmental monitoring are also included. Water, fish, and sediment sampling are briefly summarized for the previous 20 years (ca. 1959-1978). Cesium results are in curies. General conclusions and a list of reference documents end the report.

Data Elements: 89, 103, 118, 124

Annual Report of Hazardous Waste Activities for the Oak Ridge Gaseous Diffusion Plant [ORGDP], 1986-1993 (noninclusive)

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center; K-303-8 Room 13, Environmental Management Division Document Center; K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 5.5 inches

Accession or Other ID Number: 1) (H13-1.1:1986, 87:00134); 2) (H13-1.1, 89:80154); 3) K/HS-306 Rev 1A (H15-1.1:1989, 90:00619); 4) K/EM-29 (93:00324)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: The reports of this series show the amounts of hazardous waste generated or handled at the K-25 site on an annual basis from 1986 to 1993. The waste stream reports which make up the annual report list the physical form of the waste, amounts generated, years generated, the responsible process (e.g., lab analysis, various clean-up programs), the major hazard constituents in the waste, concentration units, and other pertinent information. Notification forms, fees, and shipping reports for waste taken offsite to commercial facilities are also addressed.

Data Elements: 89, 115, 103, 120, 124

[Report on] Inactive Hazardous Waste Disposal Sites, 1984

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (H15-6, 84:80012)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains photographs

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Plant Manager's Office

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1984 report consists of "Potential Hazardous Waste Disposal Facility" forms for inactive sites K-1099-A Blair Road Quarry, K-1064-G Peninsula Storage and Burn Area, K-1515-F Sewage Sludge Land Treatment Area, K-1085 Old Firehouse Burn Area, K-1070-C/D Classified Burial Ground, K-1070-A Contaminated Burial Ground, K-1070-B Classified Burial Ground, and K-770 Scrap Metal Yard. The forms include site location, years of operation, waste characteristics (if known), a description of the facility, current usage, accessibility, potentially affected bodies of water, other environmental data, and a black and white photograph of the site. The information was compiled for DOE-ORO and the Tennessee Department of Public Health, Division of Solid Waste Management.

Data Elements: 88, 89, 124

K-25 Burial Ground [Inventory], 1971

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: (H15-6.4, 71:00003)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains blueprint type drawings

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1971 volume consists of an inventory of the contents of the old classified burial sites (graves #1-67). Some of the entries may note a closing date and a general description of the grave contents (e.g., number of drums and possible contents). Groundwater analyses from monitor well samples at the K-1070-A burial ground and a blueprint of the K-33 burial ground are also included.

Data Elements: 117, 120, 124

[Chart on] K-25 Site Environmental Restoration Program Waste Disposal Status Report, [1991]

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (02236)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; the report is a chart

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report consists of a chart which indicates the status of waste disposal projects in 1991. The chart includes the facility number, disposal (drum) number, work order number, drum contents, drum/disposal status (i.e. what has happened to the drum and/or its contents), drum weight, waste characterization (RCRA hazardous, nonhazardous, uncharacterized, liquid low level, mixed waste), and project status.

Data Elements: 89, 115

[K-25 Source Inventory Summary], [1991]

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: [Unknown]

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document is a computer-generated report from the Source Inventory System, which lists, by building, radioactive sources at K-25 in 1991. Included in the report are the source ID code, building and room numbers, the source's location within the room; custodian of the source, the radionuclide involved (including cesium), current activity levels in curies, current status of the source, and the last audit date. The information was compiled as part of an "Environmental Team Information Request."

Data Elements: 89, 120

[Correspondence on] Land Burial of Radioactive Wastes, 1962-1973

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (H15-6.4, 62:00002)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Superintendent's Office

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series consists of correspondence from A.P. Huber, Plant Superintendent of the Oak Ridge Gaseous Diffusion Plant [ORGDP], to C.A. Keller of the Atomic Energy Commission [AEC]. The letters report waste burial activity at ORGDP for 6-month and 12-month periods, 1962-1973. They report the radioactivity level, the number of package units buried, the amount of waste in cubic feet, and the acreage utilized at burial sites.

Data Elements: 6, 89

[Report on] Oak Ridge Gaseous Diffusion Plant [ORGDP] Estimated Volumes of Hazardous Wastes Destined for Fixation and/or Landfarm/Landfill for the 15-Year Period Following 1982

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 4 pages

Accession or Other ID Number: (00400, Box #8)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown
Please see page 13

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1982 document lists waste categories (e.g, classified, solid) and their respective sources; the potential amount to be generated, in cubic feet; and a hazard classification. Also included is a general "philosophy" for handling these wastes at the Oak Ridge Gaseous Diffusion Plant.

Data Elements: 89, 120

Oak Ridge Gaseous Diffusion Plant [ORGDP] Quarterly Reports, 1950-1975 (noninclusive)

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Confidential/Restricted Data and Secret/Restricted Data. See Site Access section on page 4 for document center access restrictions.

Volume: 2.5 inches

Accession or Other ID Number: 1) K-600-G73; 2) K-1605-F50; 3) K-1708-F64; 4) K-1916-76

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown
Please see page 13

Arrangement: Numerical by report number

Originating Office: Unknown

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This series consists of four quarterly reports dated between 1950 and 1975 for the Oak Ridge Gaseous Diffusion Plant. The reports summarize the activities of the following departments: Fiscal Affairs, Cascade Operations, Engineering and Maintenance, Industrial Relations, Process, and Capacity Expansion Planning.

Three of the four reports contain summaries concerning the separation of cesium from Hanford and Oak Ridge wastes. The fourth describes environmental management activities for a cesium-contaminated area near the K-1405 building.

Data Elements: 89, 122, 124

Radioactive Liquid and Gaseous Waste Disposal Operations and Effluent Monitoring Reports, October-November 1982

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Document Management Center

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: 1) ORNL/CF-83/23 (ER010933); 2) ORNL/CF-83/24 (ER010932)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Liquid and Gaseous Waste Systems

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of monthly reports which document waste disposal operations and effluent monitoring activities in late 1982. They include a brief summary; data on liquid waste releases to the Clinch River and White Oak Creek; monitoring at White Oak Creek, Melton Branch, and the Pit Disposal and Process Waste areas; stack release data; and tables and graphs. Gross beta activity, strontium-90, and iodine-131 are the primary concerns and readings may be in millicuries (mCi) or becquerels per liter (Bq/l).

Although cesium is not mentioned specifically in these two reports, there is reason to believe that it may appear in other reports, or that release data from specific locations (i.e. the Process Waste Treatment Plant) may be of interest.

Data Elements: 88, 89, 103, 118, 119, 121, 124

Radioactive Waste Disposal Reports, 1961-1962

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: 1) ORNL-3189 (ER011265); 2) ORNL-3347 (ER011264)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts and photographs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Health Physics Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This series consists of excerpts from the Health Physics Division 1961 and 1962 Annual Progress Reports; these deal solely with radioactive waste disposal. The documents consist mainly of various division reports describing ongoing activities and experiments. Cesium-contaminated waste was a major concern, and articles within the reports discuss low-level waste water treatment, the White Oak Creek Drainage Basin, the Clinch River, sorption studies, soil column studies, hydrofracture, ion exchange, and cooperative efforts with outside individuals and organizations. Cesium measurement units vary depending on the study or experiment being discussed, but are usually in curies or microcuries.

Data Elements: 89, 103, 118, 124

Radioactive Waste Disposal Operations Reports, 1969-1971

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: 1) ORNL/CF-69-9-58 (ER010853); 2) ORNL/CF-70-9-37 (ER010854); 3) ORNL/CF-71-3-37 (ER010852)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown [ORNL Central Files?]
Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Waste Disposal Operations

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This record series of monthly reports consists of general summaries of Oak Ridge waste disposal/treatment activities between 1969 and 1971. The reports include information on releases to the Clinch River; monitoring efforts at White Oak Creek; amounts of waste water treated; amounts of intermediate-level waste produced, broken down by major contributor (e.g., High Flux Isotope Reactor, number of gallons); and mentions of any spills or contaminations. Waste amounts are in gallons, and specific radiochemicals are not mentioned.

Data Elements: 89, 103, 122

"Request for Disposal/Storage of Waste Materials and Equipment" [RFD] Records, 1977-Present

Location: 1. Active: K-1423, Waste Management Division Document Center
2. Inactive:

Access Restrictions: Unclassified, internal use only. See Site Access section on page 4 for document center access restrictions.

Volume: 39.5 cubic feet in 17 cubic-foot boxes and 15 file drawers labeled "RFDs"

Accession or Other ID Number: N/A

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not suitable; data is handwritten on forms

Duplication: No

Arrangement: Numerical by RFD number

Originating Office: Waste Management Division

Finding Aids: Document center database

Disposition Authority: DOE/1/9B

Series Description: This series consists of request-for-disposal (RFD) forms and any accompanying paperwork, such as analysis forms and shipping manifests since 1977. The forms are completed by various departments whenever a disposition request is made for a collection of waste. The forms include requester name; badge number; plant, division, and department numbers; RFD number; physical state of the waste; container types and ID numbers; weight; indications for polychlorinated biphenyl [PCB], classified, Toxic Substance Control Act [TSCA], Resource Compensation and Recovery Act [RCRA], radioactive, or asbestos waste; primary isotopes of radioactive waste (including quantity, measurement in curies, contamination data [from a Health Physics survey] in disintegrations per minute and millirems per hour (dpm and mRem/h)); shipping name of waste; Department of Energy hazard classification; safety clothing requirements; storage location/final disposition and date; and required signatures.

"Request for Disposal/Storage of Waste Materials and Equipment" [RFDs] Records, 1977-Present (continued)

Series Description: (continued)
Lab analysis results may also accompany the RFD if the waste is a composite of many constituents. Tests were done for organics, inorganics, radiation, and PCBs (and include arsenic, chromium, mercury, and cesium). Waste that has been shipped from elsewhere on the Reservation (Y-12, X-10) will have accompanying shipping manifests.

Forms are differentiated between Verified and Nonverified. Information on a Nonverified form has not been verified as being in the computer database ["KWTARS," the K-25 Waste Tracking and Reporting System]. Once the information is entered in the system, the RFD is put into the Verified files.

Data Elements: 8, 16, 89, 120

Site Characterization Summary: K-1070-C/D Classified Burial Ground, ORGDP, November 1989

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (00736, Box #34)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1989 site characterization report on the K-1070-C/D Classified Burial Ground summarizes existing monitoring data, describes burial areas within the burial ground and their potential waste, and discusses the early development of remedial actions for the burial ground. Sampling grids and frequency are also noted, along with some sampling analysis results, primarily for organic contaminants.

Data Elements: 88, 89, 117

Site Descriptions of Environmental Restoration Units at the Oak Ridge K-25 Site, Oak Ridge, Tennessee, October 1991

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: K/ER-47

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains photographs

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Restoration Division, K-25 Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This document consists of overview descriptions of each of the 116 Solid Waste Management Units under the K-25 Environmental Restoration Program. The history and 1991 status of each unit is summarized, including operating dates, waste characteristics, any release data, "media of concern" (e.g., soil, groundwater), and lists of pertinent reference documents. A photograph of the site is also included. Information for this report was compiled through site visits, records research, interviews, and published reports.

Data Elements: 88, 89, 117

A Study of Low-Level Radioactive Solid Waste Disposal and Storage Areas at the Oak Ridge Gaseous Diffusion Plant [ORGDP], April 22, 1977

Location: 1. Active:
2. Inactive: K-303-8 Room 13, Environmental Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: (H15-3.4, 77:00001)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains copies of photographs

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: K-25 Technical Services Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report describes activities at the five low-level radioactive solid waste disposal and storage areas in 1977. For each site, the report includes physical characteristics, monitoring efforts (e.g., for radionuclides), and frequency; current procedures; and recommendations for improved management and monitoring. The sites are: the old and new classified burial grounds, K-33 Contaminated Waste Burial Ground, K-722 Scrap Metal Yard, and K-1407-C Retention Basin.

Data Elements: 89, 117, 124

Waste Manifests, [1984-Present]

Location: 1. Active: K-1423, Waste Management Division Document Center
2. Inactive:

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 9.0 cubic feet in 6 file drawers

Accession or Other ID Number: N/A

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not suitable; much of the data on the forms is handwritten

Duplication: No

Arrangement: Chronological; may also be differentiated between incoming and outgoing.

Originating Office: Waste Management Division

Finding Aids: Document center database

Disposition Authority: DOE/1/9B

Series Description: This series consists of waste shipping manifest records since 1984, which accompany waste when it is shipped to and from the Oak Ridge Gaseous Diffusion Plant [ORGDP]. The forms identify the waste generator; transporter, storage/disposal facility, US Department of Transportation waste description, number and type of containers, waste code numbers, special handling instructions, shipping and receiving dates, Environmental Protection Agency identification codes, manifest number, and coordinating "Request for Disposal" [RFD] form number. The RFD number allows the manifests to be cross-referenced to the appropriate RFDs so that they need not be stored together.

Data Elements: 89, 120

An Aerial Radiological Survey of the White Oak Creek Floodplain, Oak Ridge Reservation, June 1987

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.25 inches

Accession or Other ID Number: EGG-10282-1136 (ER010421)

Condition: Good

Container Numbers: N/A

Medium: Paper, photographs

Scanning Suitability: Not entirely suitable; contains photographs

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: EG&G for Oak Ridge Reservation

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report presents the results of an aerial survey of the White Oak Creek floodplain conducted between September 30 and October 3, 1986. The report includes a description of the area; descriptions of the survey equipment and methods used; and discussions of the survey results. The results are broken down by isotope and shown on aerial photographs overlaid with "isopleth" maps (which show concentration levels) which give the rate in counts per second (cps). "Net Energy Spectrum" (gamma energy spectra) graphs show results in either kilo-electron volts or mega-electron volts (keV or MeV) as peaks on the graphs identified by isotope. The count rates represent activities from 110-242 picocuries per square meter (pCi/m^2) and 1400-3080 picocuries per gram (pCi/g) for cesium.

Data Elements: 89, 95, 103, 124

[Report on] The Behavior of Strontium-90 and Cesium-137 in Seepage Pits at ORNL [Oak Ridge National Laboratory], January 17, 1967

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL/ER-003549 (ER003549)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains maps and graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Health Physics Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1967 report documents the behavior of cesium-137 in seepage pits at ORNL. The report discusses fixation of the waste and the potential for migration and dispersion over time. It includes an operational history of the pits; geologic data on the surrounding area; borehole drilling strategies; and sample analysis results, in microcuries or curies per gram. Diagrams and maps show the locations of the trenches, ground layer formation (shale, clay, rock), and borehole data.

This report was published in Health Physics, Pergamon Press, Vol. 13 (1967): 897-905.

Data Elements: 89, 103, 124

Chemistry Division Summary Report for May 1945, May 1945

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1 microcard

Accession or Other ID Number: CS-3009

Condition: Poor; microcard is very faint and difficult to read

Container Numbers: N/A

Medium: Microcard

Scanning Suitability: Not suitable; report is on microcard

Duplication: Unknown
Please see page 13

Arrangement: Numerical by report number

Originating Office: ORNL Chemistry Division

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This is the summary report of the activities of the Chemistry Division for May 1945. Included are summaries for the Separations Processes, Basic Chemistry, Radiation Effects, Radiochemistry of the Fission Products, and Analytical Sections. The Radiochemistry of Fission Products section discusses cesium-137.

Data Elements: 89

The Clinch River-Watts Bar Reservoir Remedial Investigation [Background Information], November 1991

Location: 1. Active:
2. Inactive: K-1200, K-25 Site Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: (01734)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not suitable; document consist of paper copies of view-graphs

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Environmental Sciences Division, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: These paper copies of view-graphs are the background presentation given in November 1991 to the Local Oversight Committee on the Clinch River cesium contamination investigation. The view-graphs lay out the contamination areas; contamination activity levels at various sediment levels in White Oak Creek in picocuries per gram (pCi/g); an approximation of the amount of cesium in Watts-Bar Reservoir; maps of the waterways; and remedial action alternatives.

Data Elements: 103, 118

[Report on] Contamination of White Oak Creek with Active Wastes from Clinton Laboratories, September 22, 1944

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 10 pages

Accession or Other ID Number: CN-2039 H-X (A-2879) (ER010963)

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains a diagram

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Metallurgical Project, Clinton Laboratories

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report summarizes an investigation of White Oak Creek in late April 1944, shortly after discharge of active waste into the creek began in March 1944. Soil assays were done on mud samples taken from the bottom and sides of the Creek. Sample preparation is described, followed by a discussion of the results of the analyses. Cesium measurements are given in counts per minute per cubic centimeter for liquid samples and counts per minute per gram for soil (cpm/cc and cpm/g). A diagram indicates where samples were taken.

Data Elements: 89, 103, 124

[Memorandum on] Corrosion Tests on 7075-T6 Aluminum Alloy: Cesium Chloride Exposures, June 14, 1963

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: KL-1595

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains copies of photographs

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Centrifuge and Cascade Development Division, Metallurgy Department

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This 1963 memorandum discusses the results of corrosion testing on an aluminum alloy used in centrifuges and cascades. The test used cesium chloride, a product found in the cascade process. Photographs show the results on the tested pieces.

Data Elements: 89

[Report on] Development of Cementitious Grout for the Incorporation of Radioactive Wastes, Parts 1 and 2, April 1975-September 1976

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.0 inches

Accession or Other ID Number: 1) ORNL-4962 (ER008681); 2) ORNL-5142 (ER008680)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable, contains graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Chemical Technology Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This is a two-part report investigating the feasibility of putting radioactive waste into the cementitious grouts used in the Hydrofracture Facility. The 1975-76 documents record the results of leach studies done under controlled conditions. Methods and materials used in the experiments are discussed, as are results and comparisons with theoretical expectations. Projected use and recommendations, references, and nomenclature are also included. Part 2 is a continuation of the studies with a focus on the radiochemicals cesium and strontium, and measurements are given in "fraction of Cs x cm" and microcuries per cubic centimeter. The results tables may also include a grout number, type of waste, curing time, type of water leachage, length of run, and comments.

Data Elements: 89

[Report on] The Distribution of Cobalt-60, Ruthenium-106, and Cesium-137 Among Suspended and Dissolved Particles, October 3, 1968

Location: 1. Active:
2. Inactive: K-1200, K-25 Quality Division Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K-1758

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Biophysical Limnology Laboratory, Separation System Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1968 report records the results of daily water sampling at White Oak Lake from November 6, 1966 to January 2, 1968 and its analysis at the Biophysical Limnology Laboratory. The study's objective "was to establish the relation between quantity, type, and surface- or bio-activity of the particles in a fraction and the accumulation of radionuclides by that fraction." Data, placed in "data linear correlation tables" in several combinations, includes particulate count in particles per milliliter (p/ml), conductivity in microsiemens per centimeter, water temperature, pH, and nuclide activity, in picocuries (pCi).

Data Elements: 103, 116

Leachability Studies of Hydrofracture Grouts, November 1986

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/TM-9879 (ER006984)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Chemical Technology Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1986 report is the result of studies performed on simulated hydrofracture grout to test its leachability under various circumstances. The grout contained amounts of arsenic, barium, cadmium, cobalt, chromium, copper, mercury, nickel, lead, antimony, strontium-90 and cesium-137, and was tested in leachants of distilled water, shallow groundwater (like that found in limestone), and deep brine (a high chloride solution similar to that found at 300 meters depth). The report discusses the formulation of the synthetic grouts and leachants and the results of the studies. Results are measured in picocuries (pCi) and the diffusion rate is given in square centimeters per second (cm^2/s).

Data Elements: 89, 95

[Report on] Low-Level Liquid Waste Decontamination by Ion-Exchange, December 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL/TM-11891 (ER009389)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not suitable; contains graphs

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Chemical Technology Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This report summarizes the 1991 results of various ion-exchange decontamination methods used on process waste (PW) and low-level liquid waste (LLLW). Cesium is a major component of LLLW and can also be found in PW. Current storage methods (tanks) are briefly discussed, but the bulk of the report covers the results of the tested decontamination methods, including "hexacyanoferrate (II) compounds," "Batch K_d," "Ion-exchange column tests," and "Resin elution." Cesium is measured in milligrams per liter (mg/l) and becquerels per liter (Bq/l).

Data Elements: 89

[Report on] A Modified Method of Radiochemical Activity Analysis, February 13, 1951

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K-717 *or* AECD-3132

Condition: Fair to poor; report has been sanitized by cutting out classified passages

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Laboratory Division

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This 1951 report examines and outlines and new procedures for radiochemical activity analysis of cesium, ruthenium, and zirconium. The modifications to the methods sped up the analysis process through the use of a "correction factor," easily prepared "final precipitates," and "smaller carrier amounts."

Data Elements: 89, 95

Preliminary Assessment Reports on Environmental Restoration Units at the Oak Ridge K-25 Site, [1991]

Location: 1. Active:
2. Inactive: K-1400, Waste Management Division Document Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: (H14-3, 91:00268)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1991 document is a compilation of assessment reports for each environmental restoration unit (waste area) at K-25. Each report contains the following information: unit name, number, location, dimensions, and capacity; regulatory status; operation dates and present function; life-cycle operations; general waste characteristics; release data; site characterization status (inspection status?); media of concern (soil, groundwater); comments; and a list of reference documents, some of which may be attached.

Data Elements: 88, 89

[Memorandum of] Project HA-14: Distribution of Activity in Supernatant and Solid Phases of Synthetic Waste, December 21, 1949

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Secret/Restricted Data. See Site Access section on page 4 for document center access restrictions.

Volume: 3 pages

Accession or Other ID Number: KLI-432

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; document contains a diagram

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Unknown

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This memorandum, dated December 21, 1949, discusses efforts to determine the distribution of fission products in supernatant liquid (the liquid directly above settled solids) and sludge waste from Hanford to be processed in the K-25 waste recovery program. Procedures used, the activity of various radionuclides, including cesium, and general conclusions are given.

Data Elements: 89, 95

[Memorandum on] Project HA-17 Removal of Cesium from Waste, December 15, 1949

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Secret/Restricted Data. See Site Access section on page 4 for document center access restrictions.

Volume: 2 pages

Accession or Other ID Number: KLI-423

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Wet Chemistry Section

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This document is a memorandum written in 1949 that discusses three potential procedures for removing cesium from waste. A basic description of each of the procedures and the anticipated results are included.

Data Elements: 89, 95

Publications of the Radioactive Waste Disposal Section, Health Physics Division, February 1971

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: ORNL-TM-3301 (ER011178)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: ORNL Radioactive Waste Disposal Section, Health Physics Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1971 report is a bibliography of reports and documents issued by the Waste Disposal Section of the Health Physics Division. The entries, arranged in sections by subject, include the author, title, publisher, date, and report number. Subjects include: chemical treatments; Clinch River studies; deep well disposal; engineering and safety evaluations; general waste management; geoseismological studies; hydraulic fracturing; mineral exchange; pit disposal-land burial; radioactive gases; salt disposal; sintering (fixation); zonal centrifugation; and quarterly, semiannual, and annual progress reports.

Data Elements: 89

Raccoon Biomonitoring Data Records, June-December 1992

Location: 1. Active:
2. Inactive: ORNL Building 1505 Room 359, Clinch River Environmental Restoration Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 2.0 inches

Accession or Other ID Number: (W2-01336)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: By bar code number

Originating Office: Environmental Sciences Division

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: These records consist of data for the biomonitoring of raccoons in 1992. Most analyses are of raccoon hair. Data sheets identify the date and mass (in grams) of the samples; the equipment used and its sensitivity; detector type and calibration date; and radiation readings, including background levels, in counts per second. "Nuclide line activity reports" for activation products, fission products, natural products and others and minimum detectable readings are included, as are blank runs and analyses of Prell shampoo, which was used to clean the hairs prior to analysis. Cesium-137 appears in the analyses.

Data Elements: 89, 95, 103, 114

[Report on] The Recovery of Cesium-137 From Oak Ridge National Laboratory [ORNL] Radiochemical Waste, October 12, 1950

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1 microcard

Accession or Other ID Number: AECD-2999

Condition: Fair to poor; microcard is very faint and difficult to read

Container Numbers: N/A

Medium: Microcard

Scanning Suitability: Not suitable; report is on microcard

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: ORNL for the Atomic Energy Commission

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This 1950 report describes experiments which resulted in a method of removing cesium-137 from ORNL radiochemical waste solutions by a "cocrystalization" ("carrying") process using potassium aluminum sulfates. This method was easier to use than others that are briefly mentioned and removed high quantities of cesium from the waste. The report summarizes the steps taken in the experiments and makes final recommendations about the potential success of the procedure.

Data Elements: 88, 89

[Report on] Removal of Low-Level Radioactive Wastes by a Sanitary Waste Treatment Process, April 12, 1966

Location: 1. Active:
2. Inactive: K-1200, K-25 Quality Division Document Response Center

Access Restrictions: No classification level is assigned. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K-1651

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts and maps

Duplication: Unknown

Arrangement: Numerical by file code

Originating Office: Unknown

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1966 report presents the results of a study conducted to determine how efficiently standard water treatment methods cleaned radioactivity from a raw (untreated) water supply. Daily water samples were taken from October 1962 to April 1963 from the Clinch River. Results are summarized and the data analyzed for reduction in beta activity.

Data Elements: 89, 103, 124

[Report on] Requirements for Groundwater Monitoring at 39 Waste Management Sites at the Oak Ridge Gaseous Diffusion Plant [ORGDP], September 1987

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: K/Sub/ 22224C/7 (ER00101011)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable, contains maps

Duplication: Unknown

Arrangement: Numerical by file code/report number

Originating Office: Geraghty and Miller, Inc.

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1987 report evaluates the need for groundwater monitoring at various locations at the ORGDP. Each of the 39 waste management sites is discussed individually, including a description, operational status, chemical compounds present, use, remarks, and monitoring recommendations. Sites are divided into "CERCLA sites," "RCRA sites," and "3004(u)" sites requiring monitoring, and sites to be exempt from monitoring. Site maps indicating these locations are included. Sites of interest include: K-1407-C, K-1417, and K-1420.

Data Elements: 88, 89, 117

Resource Conservation and Recovery [RCRA] Logs, 1989-present

Location: 1. Active: K-1423, Waste Management Division Document Center
2. Inactive:

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: Approximately 16.0 cubic feet; located in 2 4-drawer file cabinets labeled "RCRA Logs"

Accession or Other ID Number: Not applicable

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not suitable; the majority of the data is handwritten

Duplication: No

Arrangement: Numerical by location, chronological thereafter

Originating Office: Pond Waste Management Project/Waste Management Division

Finding Aids: Document center database

Disposition Authority: DOE/14/6A

Series Description: This series consists of inspection logs for all storage areas under RCRA status since 1989. These visual inspections, occurring on a daily, weekly, or monthly basis, check for various problems, including drum placement, labeling, dates, and container and pallet condition. The forms contain spaces for the inspectors' names and titles; inspection date and time; inspection points; comments about unacceptable conditions; date and type of repairs to be done; and frequency of inspection. The areas with inspection logs are K-1417, K-1419, K-1420-A, Vaults 1-4, 6, 8, 15, 16, 19, 22, 23, K-31, K-33, K-301-1, K-301-2, K-302-4, K-302-5, K-303-1, K-303-2, K-303-4, K-303-5, K-305-6, K-305-12, K-306-1-TSCA, K-306-1-RCRA, K-306-2, K-306-3, K-306-4, K-306-7, K-309-2, K-309-3, K-310-1, K-310-2, K-310-3, K-311-1, K-711, K-726, K-770, K-1025-C, K-1036-A, K-1066-H, K-1202, K-1220, K-1232, K-1302, K-1313A, and K-1407-A.

Data Elements: 89

[Report on] Separation of Cesium from Sodium by Means of Fuller's Earth, July 15, 1949

Location: 1. Active:
2. Inactive: K-1002, K-25 Technical Library

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: <0.25 inches

Accession or Other ID Number: K-443

Condition: Fair

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by report number

Originating Office: Unknown

Finding Aids: Classified index

Disposition Authority: N/A

Series Description: This 1949 report documents the results of experiments done to determine whether fuller's earth ("a natural, fine-grained earthy material with a high adsorptive power") could be used to adsorb cesium from solutions with a high sodium presence (i.e., during electrolyte processing of Hanford waste at K-25). The report explains the materials and equipment used in the experiment; experiment procedures; and results of the various experiments. The amount of recovered cesium is usually given as percent removed, along with a decontamination factor.

Data Elements: 89, 95

[Report on] The Transport of Contaminants During Storms in the White Oak Creek and Melton Branch Watersheds, January 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 0.5 inches

Accession or Other ID Number: ORNL/TM-11360 (ER-002002352)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains graphs and diagrams

Duplication: [ORNL]

Arrangement: Numerical by file code/report number

Originating Office: Environmental Sciences Division, Energy Systems Environmental Restoration Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1991 report examines the transport potential for contaminants from Solid Waste Storage Area 5 (SWSA-5) along the groundwater system and the storm flow system when both become saturated due to storm activity. Monitoring objectives, analyte selection, sample collection and analysis procedures, hydrologic data, storm data (date, water flow amounts, rainfall), and a broad analysis of the data are included. Cesium is measured in picocuries per liter (pCi/l), and the data is expressed in tables and graphs for the duration of each monitored storm during 1988 (January, February, and May).

Data Elements: 89, 95, 103, 118

Treatment Studies at the Process Waste Treatment Plant [PWTP] at ORNL [Oak Ridge National Laboratory], March 1991

Location: 1. Active:
2. Inactive: K-1210, Environmental Restoration Program Document Management Center

Access Restrictions: Unclassified. See Site Access section on page 4 for document center access restrictions.

Volume: 1.5 inches

Accession or Other ID Number: ORNL/TM-10352 (ER-002002293)

Condition: Good

Container Numbers: N/A

Medium: Paper

Scanning Suitability: Not entirely suitable; contains charts, flow charts, and diagrams

Duplication: [ORNL] Please see page 13

Arrangement: Numerical by file code/report number

Originating Office: Chemical Technology Division for the Environmental Compliance Program

Finding Aids: Document center database

Disposition Authority: N/A

Series Description: This 1991 report summarizes the results of the set-up and testing of experimental wastewater decontamination processes to reduce the amounts of low-level liquid wastes [LLLWs] generated at the Process Waste Treatment Plant. The report describes methods previously and currently in use at the PWTP but focuses on proposed processes and bench-, pilot-, and full-scale process testing. Large-scale testing was conducted on the "Strong-acid ion-exchange flowsheet" and the "chabazite flowsheet" processes. Conclusions and recommendations are offered, and a list of reference documents is included. Test results are laid out in tables in the appendices and may contain test material ID numbers, the test date and time, and effluent concentrations for cesium, strontium, and gross beta activity in becquerels per liter (Bq/l).

Data Elements: 88, 89, 95, 124

APPENDIX A
INTERVIEW LIST

During the course of doing research and conducting inventory work at the Oak Ridge K-25 site, HAI researchers spoke with several persons who are knowledgeable about records and the presence of cesium on the site.

Sheila Thornton
K-25 Site TOA Coordinator
(615) 574-9525

Jayne Haynes/Lou Ann Ferguson
Environmental Restoration Program
Document Management Center
(615) 241-3761

Debora Newman
Waste Management Division
K-1423 Document Management Center
(615) 574-7551

Pam Crisp
Environmental Management Division
Document Management Center
(615) 574-9527

David Gettlefinger
Industrial Hygiene
(615) 574-4621

Tonia Marsh
Health & Safety Division
Document Management Center
(615) 574-8513

APPENDIX B
INFORMATION REQUIRED BY THE DEPARTMENT OF ENERGY FOR EPIDEMIOLOGIC AND HEALTH STUDIES (ORIGINAL)

DATA PERTAINING TO CONTRACTOR ORGANIZATIONS

Any type of materials that will help understand the functional organization of the contractor, or to identify individuals who may have had responsibility for operations within a facility. These types of materials are useful when studying a facility because they enable the researcher to identify key personnel who were involved with certain projects and to contact these persons, when necessary, to help understand the nature of the plant operations and potential exposures that occurred in specific areas of the plant. Examples of records that may meet these needs are:

1 Contractor Organizational Charts
2 Contractor Organizational Histories/Plant Information Packets
3 Mission Statements for Functional Units
4 Contractor Personnel Directories/Telephone Directories
5 Copy of all Position Descriptions and Effective Dates
6 Diaries, Subject Files, and Correspondence of the Facility Director

DATA PERTAINING TO INDIVIDUALS

Identification

Epidemiologic studies of workers require the creation of lists of individuals at each facility who will be included in the study. Therefore, all records containing identifying information for employees at a specific facility are of great value. These records will typically be from personnel or payroll departments and may include the following data:

7 Social Security Number
8 Name (last, first, middle)
9 Maiden Name
10 Other Names
11 Address (city, state, zip)
12 Spouse Name (last, first, middle)
13 Spouse Address (street, city, state)
14 Emergency Contact (last, first, middle, relationship)
15 Emergency Contact Address (street, city, state)
16 Employer Identification Numbers (payroll, annuity, badge, etc.)

Demographic Information

In order to compare the characteristics of the worker population with other groups, it is desirable to know the following information:

17 Birth Date
18 State (or Country) of Birth
19 City of Birth
20 Sex
21 Race
22 Education (highest degree)
23 Marital Status

Work History

Work records indicating the type of jobs performed over specific periods of time are extremely useful. Specific data items are as follows:

24 Hire Date at Facility
25 Last Termination Date at Facility
26 Reason for Termination (medical, disability, etc.)
27 Type of Employee (hourly, salaried, etc.)
28 Occupation or Job Title (all jobs titles held and associated duties)
29 Organization Assignments (building and/or department assignments)
30 Previous Work History (list of all previous employers and job titles/duties)
31 Work Location (facility-specific)
32 Military Service (branch of military, dates served, and service number)
33 Health-Related Leaves, Reassignments, Work Restrictions
34 Performance Appraisals

Medical Data

Medical records, records of treatment, incident or accident report, and company health insurance records may be useful for epidemiologic studies. Examples of the information that may be used from these records include:

35 Pre-Employment Periodic or Special Physicals, Including Lab Test Results
36 Smoking History
37 Alcohol/Beverage History
38 Pre/Post Employment Injuries/Accidents
39 Exposure History for Hazardous Materials
40 Sick Leave Records
41 Return to Work Examinations
42 Pathological Reports
43 Familial Illness or Mortality History
44 Drug/Medication Use History
45 Diagnostic X-rays (dental, chest, other)
46 Predisposing Diseases
47 Disease History

48 History of use of DTPA for Chelation
49 Incident or Accident Reports
50 Company Health Insurance Records
51 Workers' Compensation Claims
52 Identifying Information that Allows Linkage of Medical Records to Employment Record Data (i.e., name, payroll number, social security number, birth date, etc.) and to Facilities (building name, etc.)

Mortality Data (any type of information concerning death)
Many studies compare death rates in worker populations with rates in other populations. The following data items are useful:
53 Death Certificate
54 Date of Death
55 Cause of Death (including all listed causes and contributory conditions)
56 Place of Death (city, state)
57 Payment of a Death Benefit and Date
58 Vital Status at Last Known Date

External Radiation
External radiation exposure records that pertain to individual workers or to individual areas in a plant must be retained. Types of data items contained on these records are:
59 Estimated Whole Body Dose Due to X and Gamma Rays
60 Estimated Whole Body Dose Due to Neutrons
61 Estimated Whole Body Dose Due to Tritium
62 Estimated Total Whole Body Dose
63 Individual Film Badge Records
64 Individual Thermoluminescent Dosimeter Records
65 Partial Body or Skin Doses
66 Date of Each Known Exposure or Reading
67 Identifying Information that Allows Linkage of the External Radiation Records to Employment Record Data (i.e., name, payroll number, social security number, birth date, etc.) and to Facilities (building name, etc.)

Internal Radiation
Internal radiation exposure records for workers must be retained. Types of data items contained on these records are:
68 Urinalysis Testing for Radionuclides (date, indication of radionuclide, results and units)
69 Portal of Entry (for each radionuclide)
70 Analysis Type (urinalysis, whole body count, fecal analysis, etc.)
71 Whole Body Counting Data
72 Date of Each Known Exposure or Test
73 Any Record Confirming a Deposition

74 Identifying Information that Allows Linkage of the Internal Radiation Records to Employment Record Data (i.e., name, payroll number, social security number, birth date, etc.) and to Facilities (building name, etc.)

Industrial Hygiene

Chemical Exposures

Data generated to evaluate occupational exposure levels and to demonstrate compliance with exposure limits should be systematically retained. The types of records of data that should be retained may include:

75 Individual Blood or Urinalysis Records for Specific Chemicals (mercury, lead, etc.)
76 Dates of Exposures
77 Environmental Monitoring Data Relating to Specific Work Locations and Jobs
78 Concentration Readings
79 Sample Type (blood, urinalysis, fecal, breathing zone, general air, etc.)
80 Results of Units (mg/ml, ppm, mg/cubic meter)
81 Monitoring Characteristics (devices, times, control data, frequency, techniques, etc.)
82 Identifying Information that Allows Linkage of the Chemical Exposure Records to Employment Record Data (i.e., name, payroll number, social security number, birth date, etc.) and to Facilities (building name, etc.)

Physical Agents

Data generated to evaluate occupational exposure levels and to demonstrate compliance with exposure limits should be systematically retained. Such data should include:

83 Hazard Inventories of Potentially Health Hazardous Physical Agents (noise, laser light, electromagnetic radiation, magnetic fields, etc.)
84 Location and Date of the Inventory
85 Work Place or Area of Survey Results along with Exposure Levels
86 Equipment and Methods Used to Assess Hazard
87 Identifying Information that Allows Linkage of the Exposures to Physical Agents to Employment Records, to Medical Information and to Facilities

DATA PERTAINING TO FACILITIES

Area/Site Monitoring Information (by job category, year, building, etc.)

Other records that relate to the calibration, sensitivity, type, location of the equipment used for personnel monitoring, surveying, air sampling, etc., are quite useful, especially if they can be linked to specific processes, areas, buildings, and personnel. Information describing the general requirements followed by the facility for the provision of various personnel monitoring equipment, examinations, or testing is also desirable. Examples of these types of records include the following:

88 Chemical or Other Processes, by Year and Building
89 Hiring, Materials Handling, and Other Practices

90 Medical Examination Requirements for Employment/or Employment in Specific Jobs
91 Requirements for Wearing Dosimeters
92 Decontamination Data
93 Dosimeter Type
94 Dosimeter Manufacturer
95 Sensitivity of Testing Procedures
96 Dosimeter Processing Procedures
97 Dosimeter Reading Procedures
98 Frequency of Reading Dosimeters
99 Frequency of Analysis
100 Type of Monitoring System
101 Type of Monitoring Test
102 Protection Equipment Requirements
103 Isotopic Information
104 Concentration Reading
105 Location of Reading
106 Duration of Exposure Reading
107 Requirements for Wearing Protection Equipment
108 Monitoring System for Other Substances
109 Sensitivity Procedures
110 Type of Monitoring Procedures Used
111 Toxic Substances--Concentration Readings
112 Location of Toxic Substance Readings
113 Test Frequency
114 Calibration Requirements
115 Chemical Inventories
116 Information on Product Particle Sizes and Chemical Form at Potential Release Points
117 Details of Chemical or Other Processes in a Facility, Past as well as Current, Including Engineering Drawings of Facility
118 Off-Site Monitoring or Sampling Locations and Results
119 Any Measurements of Release Points from the Facility (e.g., stack sampler results, water losses, sump measurements)
120 Inventory Records of Incoming and Outgoing Material
121 Reports of Losses of Material from a Stack
122 Report of Unplanned Releases, Incidents, Spills
123 Maintenance Records of Pollution Control Devices, such as Dust Collectors, Scrubbers, or Filters

APPENDIX B
INFORMATION REQUIRED BY THE DEPARTMENT OF ENERGY FOR EPIDEMIOLOGIC AND HEALTH STUDIES (REVISED)

DATA PERTAINING TO CONTRACTOR ORGANIZATIONS

Any type of materials that will help understand the functional organization of the contractor, or to identify individuals who may have had responsibility for operations within a facility. These types of materials are useful when studying a facility because they enable the researcher to identify key personnel who were involved with certain projects and to contact these persons, when necessary, to help understand the nature of the plant operations and potential exposures that occurred in specific areas of the plant. Examples of records that may meet these needs are:

1. DOE/Contractor Organizational Charts
2. Contractor Organizational Histories/Plant Information Packets
3. Mission Statements of the Site and Individual Functional Units
4. Contractor Personnel Directories/ Telephone Directories
5. Position Descriptions and Associated Dates
6. Correspondence Files of Directors and Managers

DATA PERTAINING TO INDIVIDUALS

Identification of Individual

Epidemiologic studies of workers require the creation of lists of individuals at each facility who will be included in the study. Therefore, all records containing identifying information for employees at a specific facility are of great value. These records will typically be from personnel or payroll departments and may include the following data:

7. Social Security Number
8. Name
9. Maiden Name
10. Other Names
11. Address/Phone Number
12. Spouse Name
13. Spouse Address
16. Employer Identification Numbers (payroll, annuity, badge, etc.)

Demographic Information

In order to compare the characteristics of the worker population with other groups, it is desirable to know the following information:

17. Birth Date
18. Place of Birth
20. Sex

21. Race
22. Education (highest degree)
23. Marital Status

Work History

Work records indicating the type of jobs performed over specific periods of time are extremely useful. Specific data items are as follows:

24. Hire Date at Facility
25. Termination Date at Facility
26. Reason for Termination
27. Type of Employee (hourly, salaried, etc.)
28. Occupation or Job Title (all job titles held and associated dates)
30. Previous Work History
31. Work Location (building, area)
33. Reassignments and Work Restrictions
34. Job or Task Descriptions and Performance Appraisals

Medical Data

Medical records, records of treatment, incident or accident report, and company health insurance records may be useful for epidemiologic studies. Examples of the information that may be used from these records include:

35. Employee Physical Examinations
36. Smoking History
37. Alcohol/Beverage History
44. Drug/Medication Use History
38. Record of Injuries or Accidents Before or During Employment
39. Record of Exposure to Toxic or Carcinogenic Substances
40. Record of Sock and other Health-Related Leaves
41. Return to Work Clearances
42. Pathological Reports and Lab Results
45. Diagnostic X-Rays (dental, chest, other)
43. Family Disease and Mortality History
47. Employee Disease History, Including Predisposing Conditions
48. Record of use of Chelation Agents, including DTPA
51. Workers' Compensation Claims

Mortality Data (any type of information concerning death)

Many studies compare death rates in worker populations with rates in other populations. The following data items are useful:

53. Death Certificate
54. Date of Death
55. Cause of Death
56. Place of Death
57. Payment of a Death Benefit and Date
58. Vital Status at Last Known Date

DATA PERTAINING TO INDIVIDUAL EXPOSURE ASSESSMENT

External Radiation

External radiation exposure records that pertain to individual workers or to individual areas in a plant must retained. Types of data items contained on these records are:

59. Estimated Whole Body Dose Due to X-Rays & Gamma Rays and Associated Dates
60. Estimated Whole Body Dose Due to Neutrons and Associated Dates
61. Estimated Whole Body Dose Due to Tritium and Associated Dates
62. Estimated Total Whole Body Dose and Associated Dates
63. Individual Dosimeter Types
65. Partial Body or Skin Doses and Associated Dates

Internal Radiation

Internal radiation exposure records for workers must be retained. Types of data items contained on these records are:

68. Bioassay Testing (including fecal and urine analysis) for nuclides
69. Estimated internal doses, including nuclides, organ of deposition
71. Whole Body Counts, including nuclides, type of instrument, results, units, and associated dates

INDUSTRIAL HYGIENE

Chemical Exposures

Data generated to evaluate occupational exposure levels and to demonstrate compliance with exposure limits should be systematically retained. The types of records of data that should be retained may include:

75. Results of Bioassays (including blood and urine analysis) such as exposure to chemicals, chemical names, results units, and associated dates
77. Monitoring Data Relating to Specific Work Locations or Assignments, including monitoring instruments, control data, results, units, and associated dates

Physical Agents

Data generated to evaluate occupational exposure levels and to demonstrate compliance with exposure limits should be systematically retained. Such data should include:

83. Inventories of Potentially Health Hazardous Physical Agents (noise, laser beam, electromagnetic fields, etc.), including associated dates, building, and locations
85. Survey of Work Areas, including associated dates, kind of monitoring equipment, results, and units

DATA PERTAINING TO FACILITIES

Area/Site Monitoring Information (by job category, year, building, etc.)
Other records that relate to the calibration, sensitivity, type, location of the equipment used for personnel monitoring, surveying, air sampling, etc., are quite useful, especially if they can be linked to specific processes, areas, buildings, and personnel. Information describing the general requirements followed by the facility for the provision of various personnel monitoring equipment, examinations, or testing is also desirable. Examples of these types of records include the following:

Physical Plant and Operations Records

88. Chemical or Other Processes, including building locations and associated dates
89. Hiring, Materials Handling & Other Practices
90. Requirements for Employment in Specific Jobs
114. Calibration Requirements
115. Chemical Inventories
117. Blueprints, Floor Plans, and Engineering Drawings of Building
120. Inventory Records of Incoming and Outgoing Material
123. Maintenance Records of Pollution Control Devices such as Dust Collectors, Scrubbers, or Filters

Worker Radiation Monitoring/Protection Programs

81. Monitoring Program Characteristics
91. Requirements for Wearing Dosimeters
93. Dosimeters Type
94. Dosimeter Manufacture
96. Dosimeter Processing Procedures
97. Dosimeter Reading Procedures
98. Frequency of Reading Dosimeters
102. Requirements for Use of Protection Equipment
107. Requirements for Wearing Protection Equipment

Environmental Monitoring

103. Results of Environmental Monitoring, including radionuclide or chemical information, units, and location
116. Information on Product Particle Size and Chemical Form at Potential Release Points
124. On-Site Monitoring or Sampling Locations and Results
118. Off-Site Monitoring or Sampling Locations and Results
119. Any Measurements of Effluents from Facility Relief Point, including stack sampler results, water losses, and sump measurements
121. Reports of Losses of Material from stack or filters
122. Reports of Unplanned Releases, Incidents, Spills